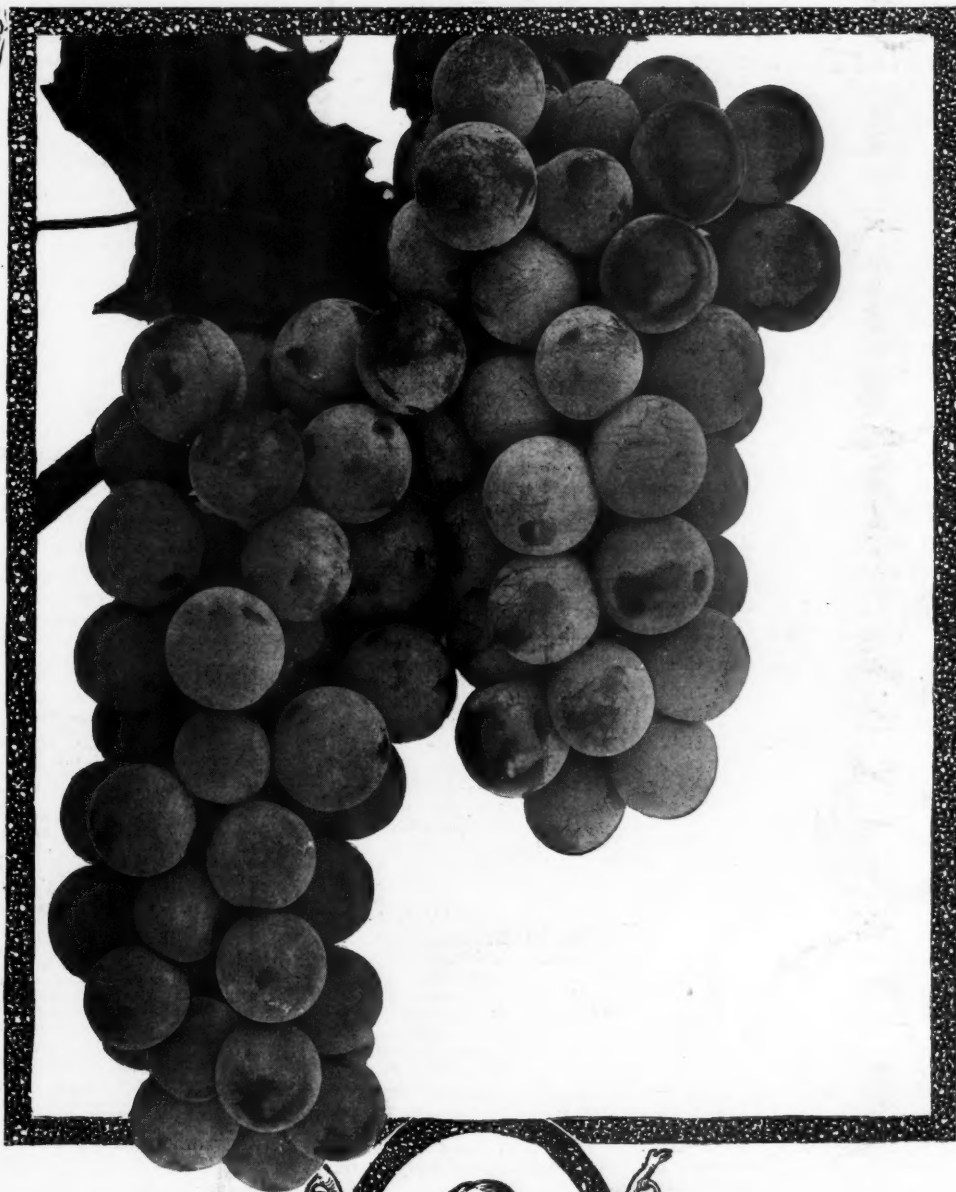


# GREEN'S FRUIT GROWER

The Oldest Fruit Journal in America



Rochester, N. Y.

Five Cents the Copy

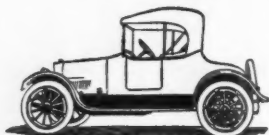
September, 1916

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## Announcing The Reo Models and Prices

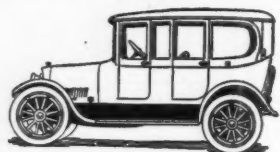
Two Important Price Reductions  
Two Interesting New Models



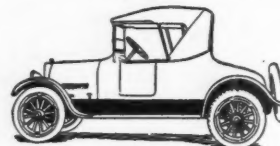
The New Four-Cylinder, 3-passenger Reo Roadster, \$875



The New Reo the Fifth, "The Incomparable Four," \$875



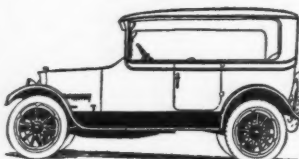
The New Four-Cylinder Reo Enclosed Car, \$1025



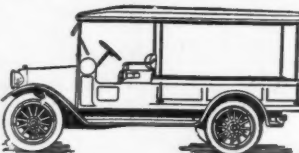
The New 4-passenger Reo Six Roadster, \$1150



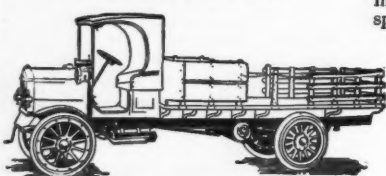
The New 7-passenger Reo Six Touring Car, \$1150



The New Reo Six 7-passenger Sedan, \$1750



1500-pound Reo "Speed Wagon," \$1000



2-ton Reo Truck (Chassis only, with Driver's Seat and Cab), \$1650

(All Prices are f. o. b. Lansing, Michigan)

YOU WANT TO KNOW—everybody always wants to know—what models Reo will make the coming year, and the price of each.

OF COURSE THERE ARE NO NEW MODELS—new chassis models, we mean. You do not look for, do not expect, do not want new chassis models from Reo.

THAT ISN'T THE REO WAY. Refinements—of course. Detail improvements—wherever and whenever we can find a place or a way to make them.

NOTHING RADICALLY NEW is ever offered to Reo buyers. For it isn't new when it gets to you—it has been thoroughly tried and conclusively proven before we let it get into a Reo car.

NEW BODY TYPES—YES—and some that put Reo in the highest class of cars in looks as well as in performance and longevity. We'll treat of each in turn.

REO THE FIFTH COMES FIRST, of course. First not only among Reos, but among motor cars.

FOR THIS IS THE GREATEST automobile ever built, we verily believe.

THIS IS THE SEVENTH SEASON that Reo the Fifth has been standard in practically its present form.

NO: THE PRICE WILL NOT BE CHANGED this season. We will not increase—we cannot lower it.

ACTUAL COST OF MAKING is now more (\$50 more) than when the present price, \$875, was set a year ago. And we had made this model so long; had so refined and perfected manufacturing processes; had reached such a high state of efficiency in production; and cut dealers' discounts so low that we had, then, reached rock bottom.

IT WAS AN ACHIEVEMENT of the first magnitude to produce such a car and sell it at such a price—\$875.

TODAY YOU SEE OTHERS increasing prices all along the line. They must do so. They have no choice.

ORDINARY BUSINESS RULES dictate that we also "tilt" the price of Reo the Fifth \$50 at least.

BUT REO PRIDE PROMPTS that we absorb the extra cost, as we have for months past, and keep the price where it is until conditions will, happily, return to normal.

THE FOUR-CYLINDER ROADSTER—same wonderful chassis, same price, is the smartest thing on wheels—the most popular car in the world among physicians, and all professional and business men. Also \$875.

TO SUPPLY A GROWING DEMAND for an enclosed body on Reo the Fifth chassis, we have planned to build a limited number. The quality will be Reo—which is to say, excellent. The top is rigidly supported at front and rear. Removable glass panels convert it into a veritable limousine for winter, and these discarded and with jiffy curtains (which are also furnished) it is an ideal summer touring car. The price is \$1025.

THE NEW REO SIX will continue in its present popular forms—the 7-passenger touring car and the classy 4-passenger roadster; and we will make a limited number with Sedan bodies to supply an insistent demand for this type of body on this splendid chassis.

THE PRICE IS REDUCED \$100 on the 7-passenger and roadster models. Now \$1150!

NOW YOU WONDER, and naturally, how we can reduce the price of the Reo Six models and not the Four—especially after what we have just told you about the increased cost of production.

SEEMS ILLOGICAL at first blush—doesn't it? But it isn't. For the truth is never illogical. And the truth is that despite the present higher prices of materials and labor still it costs us less to make this six-cylinder model than it did a year ago.

BY THE WAY—there's the greatest possible example of the workings of the Reo plan and its beneficence to buyers. Listen!

REO THE FIFTH SOLD FOR \$1250 in 1912. Its price was reduced by successive stages from year to year as follows: \$1175, \$1050, and now is \$875 f. o. b. Lansing.

SAME CAR?—No—an infinitely better car—for each year we have incorporated refinements and added equipment as the art has developed.

AND WE TOLD YOU EACH YEAR the reason for the reduction—that we had absorbed a portion of the initial—experimental, tool jig, die and special equipment—cost, and were giving you the benefit.

THIS POPULAR REO SIX is now in its third season. It has passed the same stages through which its great four-cylinder namesake went—initial costs have been absorbed, charged off. And in accordance with that unswerving Reo policy we give the buyer the benefit and set the price at \$1150 f. o. b. Lansing.

WE WILL MAKE A LOT MORE of those 4-passenger Six Roadsters the coming season. We underestimated the appeal and the demand for this model. It proved one of the most popular Reos ever built.

THE SIX SEDAN speaks for itself, though, truth to tell, an illustration does it scant justice.

YOU MUST SEE IT where you can study its artistic lines and faultless finish to fully appreciate this latest Reo which we price at \$1750.

NOW A WORD ABOUT THE TRUCKS since 90 per cent of all Reo automobile distributors also handle Reo motor trucks.

PRICE OF THE 1500-POUND REO "Speed Wagon" has been reduced to \$1000.

SAME REASON—SAME POLICY—reduced cost of manufacture despite higher present cost of materials—as enunciated in speaking of the Reo Six.

AND THAT TWO-TON REO. What shall we say? What need we say? We submit, it is the greatest 2-Ton motor truck in existence. Has been standard for longer. Has given greater proof of its sturdiness and efficiency and low cost of upkeep.

IF WE ARE TO JUDGE by that over-demand, we may well assume that we could sell all that we could make were the price \$2500, instead of \$1650.

AND FINALLY A WORD about the big general plan—a brief reiteration of the Reo policy.

WE STILL ADHERE to our determination never to make more Reo cars or trucks than we can make and make every one good.

TEMPTATION IS GREAT of course. Dealers protesting, buyers begging for more Reos. But we know—we know—on what solid foundation this Reo success was built; and we'll jealously guard that policy to the last.

RIGHT NOW—AUGUST—there are more orders on hand at the factories than at any previous time in Reo history. Orders hopelessly in excess of factory output—and that also is greater than ever before.

AND RIGHT NOW Reo stands higher in the esteem of buyers and of the trade than ever before.

\$30,000,000 PER ANNUM is not small by any means. Reo is in fact, one of the largest in point of production. We have no ambition, however, to be the largest. Don't want to make all the automobiles—only the best.

RATHER THAN INCREASE the quantity we shall strive always to improve the quality so that, as the art advances and cars generally improve, still Reo will continue to be known as—"The Gold Standard of Values."

REO MOTOR CAR COMPANY  
REO MOTOR TRUCK COMPANY

Factories: Lansing, Mich.

"THE  
GOLD STANDARD  
OF VALUES"

The Oldest  
Fruit Journal  
in America

# GREEN'S FRUIT GROWER

Published by  
Green's  
Fruit Grower  
Company

Volume 36

Rochester, N. Y., September, 1916

Number 9

## Grape Growing for Pleasure and Profit

By C. A. Green



Concord

THE first season of my occupancy of the run-down farm now known as Green's Fruit Farm, I planted a small vineyard. Every vine lived, thrived and bore fruit abundantly. The trellises upon which the vines were trained were made of wire held in place by posts 7 ft. high. The distance between the rows was 8 ft. with the same distance between the vines in the rows. I also planted grape vines about the buildings, the house and some of the outbuildings, and trained an old vine over a rustic arbor in the dooryard.

The total expense for the purchase of the young vines and the planting both in the field and around the dwelling did not cost over \$10.00, but the effect was notable to anyone passing that way. I know of no plant, vine or tree that will accomplish more in making a rural home attractive than the grape vine. There is a homelike expression of this vine which appeals to all when seen on a trellis in the garden, when clambering over a rustic arbor under which the children can play, or when climbing upon the porch or over the gables, or when growing in a little plantation in the field.

I have claimed that there is no more economical food for the ruralist and his family than grapes. Some would consider it extravagant if they saw a plate or basket of fresh picked ripe grapes upon the table of the farmer daily, but I claim that if the farmer knows how to produce these grapes and plants the right varieties they will not prove an expensive article of daily food.

### A Bushel from a Vine

"How much fruit will a grape vine produce?" I am asked. This depends largely upon the variety, how it is trained and pruned, and upon the soil on which it grows, but I assure you there is no difficulty in securing one or two bushels of grapes from a vine so prolific as the Concord, Worden, Niagara and many others, particularly if the vine is growing near the walls of the house with plenty of opportunity to climb around the buildings and over the porch. The average vine as grown in the vineyard will not have such an opportunity for a large yield, but even in the vineyard the vines should yield a bushel of grapes each. In order to indicate there is scarcely a limit to the productiveness of the grape vine I will say that there are well authenticated instances where a single grape vine has grown a ton of grapes, but this has been secured only after many years of fruiting when the vine had been able to cover a large space, the roots finding nourishment in remarkably fertile soil and under the most favorable conditions.

While the grape vine responds to high culture it will bear fruit abundantly without any cultivation, which cannot be said of most fruits. The vine growing over my dwelling does not receive any cultivation and yet it spreads over a surface of 50 ft. in length and about 12 ft. in height. I have seen grapes growing in a neglected vineyard which had received no cultivation, but which



Worden

had been pruned each season, which was bearing a fairly good crop of grapes.

Grape growing to a moderate extent is a pleasant pastime. I have in mind an aged friend who gave up farming, turning the farm over to his son. Not wishing to be idle, and realizing that life may be prolonged by enthusiastic labor and shortened by idleness, he planted to grapes half an acre of light loamy soil situated on a slope facing the south. He was remarkably successful and might be seen every day during the growing or fruiting season tramping about among his vines, watching their growth and fruitfulness with increasing interest as the years went by. This friend recently died at the advanced age of about ninety years. All of the work done upon this little vineyard was done with my friend's own hands even to the picking of the ripe fruit and its preparation for market. He sold them in the neighboring villages, going from house to house with a basket of grapes of various colors on his arm. He soon received a welcome from a large number of patrons who had learned the superiority of his product.

When the Niagara grape was first introduced it was extensively advertised and exhibited at the horticultural meetings and the fairs and caused great interest in grape growing and in the planting of many vineyards by inexperienced men. The result was large profits to the owners and manipulators of this variety, and in many instances to good profits to those who planted the vineyard, although these planters were somewhat handicapped by restrictions. Most of these planters were novices in grape growing. They knew but little about planting, pruning or marketing, and yet they succeeded fairly well as I found evidence in my travels over the farms on which these vineyards were located. There seemed to be no difficulty in getting an abundance of delicious fruit. The quantity was so great it could not be sold in the neighboring villages or among nearby farmers but had to be sent to the cities.

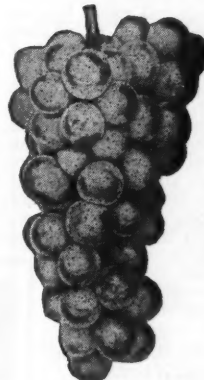
### Home Planting of Grape Vines

I do not advise the novice, the man who has had no experience, or but little, to plant a vineyard. Managing a vineyard requires large experience, but I do advise the planting of grapes for home consumption in a much larger way than grapes are grown at the present time. Grapes are sold at low prices by the ton, sometimes as low as \$10.00 or \$20.00 per ton. While this is not a very profitable price, it indicates how easily and cheaply grapes can be grown and should offer an inducement for the home planting of grape vines, which is the object I have in writing this article.

In many sections of this country the season is rather short for the full development or ripening of many kinds of grapes. Even at Rochester, N. Y., varieties like Catawba and Isabella seldom ripen to perfection owing to the brevity of the season and early fall frosts. In some years even Concord does not find our season long enough for its full development, but it is seldom that the Worden, Delaware or Brighton does not ripen fully. Here is evidence that an early ripening variety of grapes is greatly to be desired except at the south. In addition to those named we have the Moore's Early, the Diamond, and some of the Roger seedlings such as Agawam and Lindley which, however, ripen a little later than Worden.

### These Notes taken from Grapes of New York By HEDRICK

Niagara Grape. Niagara is the leading American



Lucile



Carman

green grape, holding the rank among grapes of this color, that Concord does among the black varieties. It is likely that Niagara will continue for some time to be the leading green grape for the market.

Diamond Grape. We usually accord Niagara first place among green grapes, but Diamond rivals it for the honor. The fruit ripens slightly earlier than Niagara and keeps well. In demand among wine makers and especially for the making of Champagne.

Delaware Grape. Next to the Concord it is the most popular grape for garden, vineyard and wine press now grown in the United States. It is especially desirable to cultivate in small gardens, because of its delicious and handsome fruit and compact habit of growth.

Concord Grape. Most widely known of the grapes on this continent. In New York approximately 75 per cent of all grapes grown are Concord. It succeeds on a greater number of soils than any other variety. It can be produced so cheaply no other grape can compete with it in the markets. Grape juice is made almost entirely from Concord.

Carman Grape. Its most valuable character is that of long keeping, whether while hanging on the vine or after harvesting.

Campbells Early Grape. It attains its full color before it is ripe and is therefore often marketed in an unripe condition.

Moore's Early Grape. Is the standing grape of its season in New York. It is the best early grape for New York. John B. Moore of Concord, Mass., is said to have originated this variety from the seed of the Concord. Ripens from two to three weeks earlier than Concord.

Brighton Grape. It deteriorates in color after maturity, so cannot be well shipped to distant markets, and it is self-sterile to a more marked degree than any other of our commonly grown grapes. Brighton is a seedling of Diana Hamburg, pollinated by Concord. Raised by the late Jacob Moore.

Worden Grape. It possesses most of the good qualities of Concord and lacks some of its bad ones. It differs chiefly from Concord in having larger berries in bunches; in having better quality and it being from a week to ten days earlier. Worden is very popular in New York in the North, for commercial plantations and the garden.

Lucile Grape. It is earlier and the crops exceed those of the Concord. Good shipper.

### Grapes for Home Use By Prof. VAN DEMAN

In almost every part of North America, from Nova Scotia to Mexico, and from British Columbia to Florida, some species of grape may be grown. The foreign grapes are not suited to the soils and climatic conditions east of the Rocky mountains, except in very rare cases and

(Continued on Page 5)

## Making Old-Time Apple-Butter

Written for Green's Fruit Grower

By FELIX J. KOCH

Removed just sufficiently from the big, bustling city itself to give to the site all the country charm that consumers delight ever in associating with the dainty,—the farmers of that portion of the American midwest which radiates out from Cincinnati are engaging, ever more and more extensively in the manufacture of homemade apple-butter,—the kind of apple-butter that mother used to make, and whose flavor sends the memory back to the white farmhouse at the vanished crossroad, and to pancakes, or biscuits, some cold winter's morn.

Not alone is the trade in apple-butter proving a most lucrative side line,—a sort of paying avocation to the more usual profession of farming,—but it is luring city folk, motorists especially, out to the particular countryside to see that sight of which city folk have so often read and which they so seldom get the chance to see—the making of real, country apple-butter. Naturally they come and they buy,—and not only apple-butter, but—THERE,—that's a tale in itself.

Whatsoever, apple-butter time among the Taylor's, Creek hills, within easy drive of Cincinnati, is, indeed, a season not to be missed.

The work may be said to begin with the cider-mill, for makers of the butter collect apples with especial eye to it, from their orchards in this quiet vale, and bear them to the nearest cider-press to be turned to cider with this future end in mind. Cider-making is too old a tale to be even touched on here, but even to a rustic there is always charm to it, watching the old horse travel round and round as he draws the beam that turns the crank, that makes the apples grind, and the taste of the cider, fresh drawn, that cold, autumn morn,—it seems to give the first advance note of Christmas-time and to tell that winter is actually near, and to fill the soul with a sense of the halcyon days when winter brings the farmer rest.

While the men-folk are off at the cider-press, the farmer's wife prepares for the butter-making itself.

From its place in the woodshed, where set away in the spring, after the maple sirup had been boiled down, she brings out the great iron kettle sacred to these ends alone. There's a crowbar for its hanging on, and two old bits of pipe have come down in that home from who shall say when, for setting the crowbar across. Thus the gipsy-kettle, as Jack Roosa dubs it, is put into place,—things within and without are scrubbed, of course,—the ground round about is cleanly scrubbed,—the farmer's small boy brings wood for the fire,—and if the men-folk be not yet returned from the cider-mill, the crocks are made ready beside.

Then, in due course, the return with the cider, and filling the kettle, the proceeding to let it boil.

While it boils those farmer-folk exchange half the gossip of the countryside, heard from all the other yeomen here, gathered down at the cider-press. If you want a true ink of the township's mind, just gather at the cider-presses, in apple time.

Meanwhile the cider bubbles and boils, and the crisp, frosted air scents of the steam. Tinctured with delicious apple smell there is that of the burning logs. One must use only wood for fuel, experts say.

The cider then is boiled down to about half the first amount, and usually some five hours are required to such end.

Come to proper consistency for that stage of the work, it is thickened beside. Probably a bushel of apples, sliced say the evening before, or sometimes out here on the stoop while the cider boils, will go into the mass. Sugar, too, is added in no little amount. They are figuring on a ten-gallon mess here you see.

Now and then one draws off a bit in a ladle to see how things are progressing. Now and then the children will taste,—now and then there's a bit of stirring. And still the cider-apple-sugar boil down to the butter. Twenty gallons of cider to reduce the ten gallons of butter in all takes no little time. What's more, at the end of the five hour boiling aforesaid, a bushel and a half of peeled apples will still be added. Then the mass is cooked some four hours more,—and even then some,—if it does not quite suit the farm-wife's practiced eye.

As a result, the twenty gallons of cider will become not to exceed seven gallons of apple-butter,—and usually six,—since folk prefer the butter fairly thick.

Apple-butter made thus in the big outdoors, put up in the simple stone crocks and adorned with the gay labels the farmer's wife will buy at the general store at the cross road, filling in the line beneath the galaxy of fruits in her own hand, as prescribed, is a dainty fit for kings to eat. In fact, kings wouldn't have much chance to get hold of it here, for it's bought up almost as soon as it's made and often even ordered in advance.

Of course, you can buy apple-butter, factory made, in almost any store now-a-days, but compared to the butter from these Ohio hills, that is tame and tasteless and commonplace, and not to be thought of in the same breath.

If you have a strong point in your character, don't make it a weakness by admiring it too much.

## A Noted Grape and Berry Grower

There is not in all this wide country a man more deeply interested in fruit growing who is so well and favorably known as John Burroughs, whose home, vineyard and berry field are on the Hudson river not far from New York City. He is over eighty years old and yet is in full possession of his physical and mental faculties, laboring like any other farmer in the fields a portion of each day and living a secluded rural life. He takes delight in nature studies. He is one of those men who sees "sermons in stones, books in the running brooks and good in everything." He does not live entirely upon the profits of his fruit growing. He is a popular writer for the magazines and other periodicals and is liberally paid for these contributions.

He has heard that William Hunt of Branchport, N. Y., recently reached the advanced age of eighty-one years and has written Mr. Hunt the following sympathetic letter, indicating the interest which aged men bear to one another:

West Park, N. Y.

Dear Mr. Hunt: Why should not one old farmer send a word of greeting to another old farmer, though a stranger to him, upon his birthday, and wish him joy in the days that remain to him? All farmers are akin; they were nursed in the same great lap of mother Nature and are brothers in the love of the soil. I have always been a farmer at heart and much of the time in reality. Here on the Hudson I have a twenty-acre fruit farm and cultivate grapes and literature. I do less of the former than I used to, but still try to keep the vines pruned and thrifty in my intellectual vineyard.

I hear, through your daughter, Mrs. Goodrich, you still do a man's work in the fields. I envy you. I plant and hoe the garden, pump water in the kitchen, saw and split a little wood, drive my Ford car, etc., but a half hour in the hay mow the other day, pitching back hay, convinced me that I do not want a job in haying.

I was born in Roxbury, Delaware county, on a dairy farm, I own the old homestead of 350 acres and usually spend my summers there.

I trust you will easily reach your 90th birthday, and, if I am around, I will drop you a line then. With hearty good wishes, I am, sincerely yours,

JOHN BURROUGHS.



The above photographs show the interest taken in making apple butter in western New York. The top photograph shows the kettle and the fire beneath in which the apple butter is made. The lower photograph shows the apple butter jars placed in the sun. Tinware and other similar materials are often exposed by the housewife to sunshine as it is assumed that the rays of the sun will destroy any germs clinging to the utensils, which according to the latest information is true, sunshine having been discovered as the best disinfectant for many things, including bedding and the sick room.

## Advantages of Planting in the Fall

The proper time to plant any kind of tree is when it can be done well, either in spring or in fall. Because of its special convenience, fall transplanting of hardy, vigorous, well-rooted trees that have been grown and wintered in the open, without protection, is becoming more and more extensively practiced in most localities, says a well-known nursery firm.

Fall planting should be regulated by conditions rather than by date; as long as the ground is damp and free from frost transplanting is safe.

The latter part of August and the whole of September are the proper fall season for transplanting most kinds of evergreens.

October and November are desirable months for transplanting deciduous trees. The general rule of hard-woods is to transplant as soon as the leaves begin to color. By removing the leaves, the work may be done somewhat earlier if necessary.

Land which is better adapted to the growing of trees than to any other use is often too wet to be planted easily in spring, but may be satisfactorily planted in fall.

In dry, wind-swept places fall planting is not desirable. In some regions there is more moisture in fall than in the months immediately following the spring planting season; this is a great advantage. Where it is not so, unless the ground is naturally moist, the importance of available water or mulch must be remembered.

The technical basis of fall planting rests on a physiological fact, demonstrated by a long series of experiments which proved that root growth still continues after the leaves of deciduous trees have stopped growing and the evergreens have put on their protective winter covering; this root growth continues till after the ground freezes. It is easily seen that the roots of trees set out in autumn get well established, if the planting is successful. They thus get an early start in spring, and much time is saved. It has been noticed frequently that trees successfully transplanted in fall make a better growth during the following summer than those equally well set out in the intervening spring.

Vegetation is of course more active in fall than in spring, and there is consequently more evaporation in fall. Fall planting, therefore, is most successful only when plenty of moisture is assured, or some form of temporary protection from drying winds and sun. It can be well done where the ground is naturally moist (or when damp weather prevails) or where the trees can be watered. The ground near the plants should be covered with very strawy manure or leaves to prevent the "heaving" caused by alternate freezing and thawing. This heaving is especially likely with very small plants in wet, heavy soils.

Underplanting of an existing wood and planting in brushy places are both generally successful, owing to the protection afforded by the larger growth.

## Grading and Packing Apples

We know an apple grower who makes an effort to produce fine apples. He prunes and sprays, cultivates and fertilizes his trees and his apples are most excellent. But he does not stop there, he grades his fruit and puts it on the market in an attractive manner—says Farmers' Guide. The results are that he sells to select city trade and cannot supply the demand. He has learned the important lesson that the producer is not only responsible for the quality of the fruit grown but he must also be held accountable for the condition and appearance of his product when it reaches the market. This is an important point often overlooked by those who would supply the market with apples. They do not take enough pains to grade and pack their fruit properly.

In the past the grower could load up a wagon box full of apples and haul them off to town and sell them. But that day is past. The consumer is becoming more exacting and demands that what he buys must be strictly first-class. The grower must at least grade his fruit if he wishes to maintain his trade and if he will take the trouble to pack it properly and label it he will find it to his further advantage. We cannot give here directions for the proper packing of apples (a bulletin from Purdue University will give all the details) but we do wish to emphasize the importance of such a procedure. Don't try to sell ungraded fruit and expect to get the highest price and have a satisfied customer. Sort out the best apples and dispose of the inferior grades for just what they are or run them through the cider press and turn them into vinegar. It pays to find out what the trade demands and then make an effort to supply it.

Naming the farm. Yes, give your farm a name. Dozens of names will suggest themselves to you, but decide upon one quickly, and have a sign painted with the letters so plain that it can easily be read. If you have anything to sell, write it down on the blackboard giving the name of your farm.

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## Preventive Measures

The White Grub In 1916,  
From The Michigan Farmer

Immediate measures will do much to keep down the chances for destruction, by this pest, during 1918. Inasmuch as the grubs will come near the surface of the ground during the latter part of April it is best to delay the plowing of last year's infested ground as late as possible. This will crush a number of them. The more the ground is worked and the finer the dirt is broken up, the greater the destruction of animal life contained therein. A farmer in Branch county, last year found, while digging a ditch for a tile drain, that his land contained a large number of white grubs. He had planned to grow corn here but as corn is a favorite food of the grub it looked as if he would have to change his rotation. Not wishing to do this he plowed the field, sixteen acres in all, and dragged it four times. Then he spread two tons of commercial fertilizer, planting the corn about the first of June. On the twenty-fifth of September the corn was heavy both in stalk and leaves and also in the amount of grain.

Chickens following the plow will pick up many of these pests before they get a chance to crawl back into the soil. If a piece of pasture is found to be badly infested with these grubs let the hogs have free range for a while [and they will prove very efficient in freeing the land of these undesirable].

Planting the next crop as late as possible will also aid as the grubs soon become dormant pupae and as such do very little damage.

The grubs are not the only ones that do the damage although they are responsible for the major part of it. The adult, commonly known as the June-bug, feed on leaves of fruit and shade trees where they can be controlled by spraying with an arsenical or by the use of trap-lights. The beetles fly at night and are attracted to lights, so by suspending a light over a tub of water, into which some kerosene has been poured, many may be caught. This method is very little used however.

The beetles emerging in the spring of 1917 can be controlled to a considerable extent by watching to see when they appear, which will be during the latter part of April or May, and then spraying the trees.

As the white grub is bad on such crops as corn, timothy, early potatoes and strawberries, to get the best results these should not follow one another. Small grains or clover have been recommended for use in a rotation following one of the above crops.

There have been many reports of the white grub doing damage already in some sections. There will be many sections in the state that were little troubled with the grub last year but will find it in great numbers this year. This will also mean that as the grub takes three years to pass through its life-cycle, it will be bad again in the year 1919. Mich. Ag. Col. Don. B. Whelan.

## Plant Fruit Trees This Fall

All perfectly hardy trees should be transplanted in the fall rather than the following spring if we can rely upon the results of tests made at the Missouri Agricultural Experiment Station. Johnathan apple trees planted in the fall made nearly twice as good a growth as those planted the next spring. Of cherry trees transplanted in the fall every one lived while only a third of those planted in the spring survived the dry summer of that year. Those which did live made only a quarter as good a growth as those planted the fall before. This comparison is based mainly on the terminal growth or length added to the branches which is a very important means of telling how an orchard is thriving. Even peach trees and others less hardy than apple and cherry trees do better when fall planted in the Southern quarter of Missouri. Fall planting is better even farther north if followed by a mild winter but a severe winter is likely to kill the trees.

In ordering fruit trees for fall planting, insist that they be dug and shipped just when the leaves begin to fall and the remaining leaves can be easily stripped from the nursery stock. These young, rapidly growing trees hold their leaves from two weeks to a month longer than those in the orchard which have been bearing for some time. During most seasons the best time for transplanting is during the first half of November but planting any time before the ground freezes has been found to give better results than spring planting.

## Blackberries

In the cultivation of this fruit the preference is also for low pruning, but some varieties show lack of uniformity in their manner of bearing fruit. At times most of it will be found close to the main stalk, and at other times it will be well out on the laterals. It is better to leave such varieties until the blossom-buds show before pruning in order to gauge the amount of fruit which should be produced. Wilson's Early sets fruit buds thickly near the base of the laterals, and should, consequently, be pruned closely on the side growths. Early Harvest requires a longer pruning of the laterals. Eldorado and Minnewaska are good kinds. Plant in fall.

## The Value of Nuts as Food

I am a great believer in nuts as a human food, says Prof. Charles W. Burkett. It is not a mere theory with me. I like nuts. There is nothing among all human foods that furnishes a better feeding stuff—the materials that the system needs for muscle, energy and activity—than the common things we call nuts.

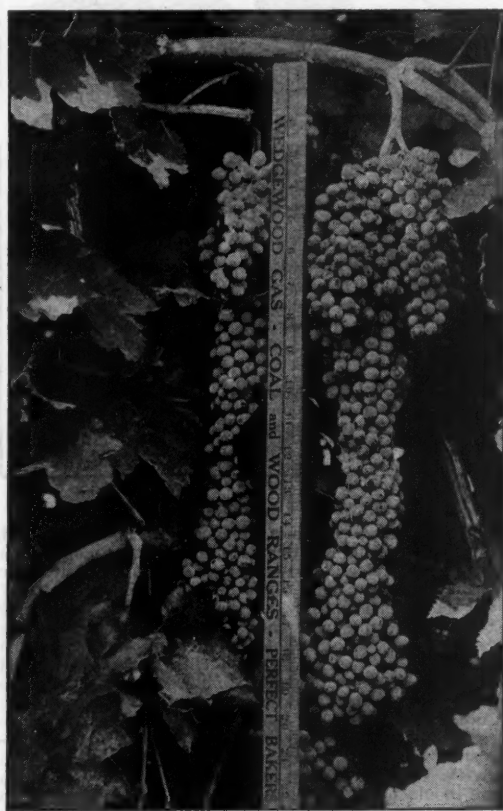
But some one says "nuts are not easy for digestion." I have never heard the vegetarian say this. I never heard a person who has made an attempt to like nuts say this. It is the meat consumer,—the fellow that eats meat three times daily,—who says that nuts do not agree with him.

I like nuts because they contain so much protein, the part of a food that builds up muscle, the tissue that goes to make good flesh and blood; good, strong internal organs. Then, too, nuts furnish materials that make work easy and the fat that produces energy.

When nuts are properly eaten it is hardly likely that people will call them hard of digestion. Of course, if we eat a hearty meal of meat, fish and pastry, we will not be disposed to think very highly of nuts as a finishing course. The stomach is then full, and I surmise few of us chew our food quite so perfectly toward the last of the meal. If indigestion follows, it is hardly right to lay the blame to nuts.—American Nut Journal.

Bees are a big factor in fruit production, especially those fruits requiring cross pollinization such as many varieties of apples and pears. Even the self-fertilizing peach grows bigger and finer when cross pollinized.

## Remarkable Clusters of Seedling Grapes



That the grape is a marvelous fruit is indicated by the clusters shown in the above photograph, the longest cluster of which is over 20 inches in length. It is not unusual on the Pacific Coast for clusters of grapes to weigh five pounds or more each. We have not at the north grapes bearing such large clusters. I am not certain that it is desirable that the clusters of grapes should be so monstrous in size. Possibly it is for the best that the clusters should be no larger than those bearing on the Concord, Worden, Niagara and Delaware, which are more convenient in handling than the larger clusters. For instance, what would you do with a stem of grapes weighing five pounds, 20 inches in length, which you desire to offer to guests at breakfast or dinner? You would have to divide this cluster among half a dozen or a dozen people, and the sections would not be so attractive as the smaller cluster about the right size for each guest to consume.

Grapes and grape juice are wholesome and sustaining food and among the easiest to digest. This fact is shown in the grape cure of Europe, where grapes were given in unstinted quantities to invalids with good results.

## When Apples are "Hard Ripe" Rough Handling Injures Keeping

The proper time for picking apples is very important. Too early picking sacrifices color, quality, both for eating and keeping, and also fruit spurs; while picking too late results in loss of keeping qualities and often in loss from winds, says The Farmer's Guide. The best time for picking most apples, therefore, is when they are "hard ripe," i. e., when they have developed their full size and redness, but have not yet begun to soften nor to show the yellow colors, except perhaps in occasional specimens. Apples that develop no red color are picked when they have reached full size, or when occasional specimens have begun to soften or to part readily from the twig. Summer and early autumn varieties, intended for immediate use, are best ripened on the trees, otherwise they should be picked as above. In many cases, two or more pickings are found desirable and profitable to permit undeveloped fruits to mature.

In addition to picking at the right time, the best keeping qualities are secured by avoiding bruises and broken skins and by immediate cooling of the fruit. Leaving the apples in piles with the sun beating on them is exceedingly damaging to keeping quality. The minute bruises which soon appear in storage are best avoided by picking in round bottom, cloth-lined, swing-handled baskets. In storage, temperatures of about 30 to 35 degrees F. are satisfactory. A good storage house, or rented space in one, relieves one of the necessity of selling at once and thus often secures distinctly better prices, even at picking time.

In general, the essentials of a good pack are: clean, odorless packages; fruit strictly true to grade throughout; reasonable uniformity in size and color; and sufficient compression to avoid looseness in transit. The labeling and varietal name should be correct, and the name and address of the grower or the person in whose interest the packing is done should be given. It is usually good business to pack in this way, wholly aside from any other consideration, as such fruit regularly commands the highest prices on any market in which it becomes known, especially when the grower also stands back of it with a substantial guarantee.

The particular style of package varies with the conditions to be met. Early apples are usually best marketed in peach baskets, unless the distances are too great. For the later varieties, barrels or boxes are preferable. The relative value of the latter packages depends largely upon the amount of fruit to be marketed, and upon its uniformity, perfection and quality.—Pennsylvania Experiment Station.

Many attempts have been made to make a standard for an apple barrel. The latest attempt is embodied in the Sulzer bill which became a law July 1, 1913. This law provides that the standard barrel for apples shall be of the following dimensions when measured without distention of its parts: Length of stave, twenty-eight and one-half inches; diameter of head, seventeen and one-eighth inches; distance between heads, twenty-six inches; circumference of bulge, sixty-four inches outside measurement; representing as nearly as possible seven thousand and fifty-six cubic inches. Barrel materials have been various, though elm and maple have predominated. Poplar and birch are also used for the heads. Six to eight hoops, generally sawed rather than split, give solidity though they should be renailed before packing. The main features should be strength and lightness, cleanliness and attractiveness. Hence a grower should seek to obtain his supply early in the season, thus securing the best at least cost. Second-hand barrels often lose good trade mainly because of their soiled appearance. Neat, clean new packages must be used if good packing is made profitable.

The barrel is best adapted for the wholesale handling of average grades. It is easily and quickly packed, can be very easily handled in transportation and the three bushel amount of medium (or better) quality is a convenient unit of sale for many purposes.

During the last few years there has been used by growers of fancy apples, a bushel box which prevents considerable former loss of tender fruit and which is well adapted for retail trade. The box used in the Indiana Apple Show is the one most used in the leading fruit districts. Following are the specifications:

Dimensions: 10 1-2 inches deep, 11 1-2 inches wide, 18 inches long, inside measurements. Materials: Top and bottom two pieces each and three-sixteenths inch thick in order to be flexible. Soft wood such as pine or bass-wood should be used. If harder wood is used, a thickness of one-eighth of an inch is ample; sides: three-eighths of an inch thick in order to be rigid so that boxes may be piled on their sides in storage or transit; ends of one piece each and at least five-eighths of an inch thick. Four cleats are included and tops and bottoms nailed at the ends only.

## Picking Pears

The pear is quite exceptional as compared with the ordinary orchard fruits in that it is much better if picked from the tree before it is ripe, and then ripened up either closely packed in a box or stored in large quantities in a tight room. Very few pears are at their best if allowed to ripen on the tree.

## Mulching Strawberries

By J. S. UNDERWOOD, III.

The practice of mulching strawberries occupies its place in the line of actual necessity as well as cultivation of the ground. In its nature and habit the strawberry plant is essentially evergreen. What I mean is this: When protected from the injurious effects of winter and spring freezing the leaves of this fruit plant will remain green until the opening of the following spring. In this condition they are ready to take up anew the activities of life until superseded by a new growth of leaves. Under the natural conditions of its wild state the plants are usually pretty well protected by nature, that is, the grass and weeds among which it grows afford more or less protection to both the leaves and crown. Then, too, under such conditions snow is held where it falls and snow, while it remains, makes a perfect mulch.

Bush fruits ripen their wood growth. The fruit buds are well encased in this wood and able to withstand low temperatures without injury. It is not so with the strawberry. Its fruit buds are encased in the crown of the plant and remain in a state more or less succulent. Alternate freezing and thawing of this growth are extremely injurious. Injury from this source is greatest when the roots are locked in frozen soil for then nature cannot replace the juices extracted by the freezing and thawing process which always takes place when low night temperature follows a day of sunshine. When the leaves are deprived of their juices they shrivel. If the process is long continued the plants will finally die. At any rate the vitality of the plant is lowered just in proportion to the amount of such exposure. The truth of this may be easily verified by experimenting along this line.

There exists a difference of opinion among some growers as to what material serves the purpose of mulching best which differences are largely due to a prejudice favorable to the material which may be the most easily obtained. It may be said that any coarse material spread over the plants admitting the circulation of the air and furnishing sufficient shade to prevent the too hasty action of the warm sun serves the purpose for which mulch can be reasonably applied. The prime object is of course to retain the frost in the ground while the season of frost is on or at least compel in some measure moderation in the action of the elements. There is, however, a serious objection to the use of fallen leaves as they too soon enter the process of decay and in that state become too compact and smother out many of the plants.

From my own experience and observation in mulching the plants I believe there is no material that will compare with good sound straw. But in applying straw as a mulch it is well to bear in mind that its purpose is not so much to protect the plants from the cold as to prevent repeated thawing and the danger of smothering the plants with too much covering must be guarded against in the application of straw as well as with any other material.

The time for applying and removing the mulch is better indicated by conditions than by calendar calculations. However, I usually apply the mulch about October 15th and remove it about the 20th of March. The first light freezing of the ground is a good indication of the time to apply the mulch and it can be removed with comparative safety when oats are being sown.

Some advocate keeping the plants under cover as late in the fall as possible to avoid in some measure the disastrous effects of late spring frosts in killing the early blossoms. But if we will consider the latter end of the strawberry season (the droughty period being due) we will find that we assume greater risk of losing berries and more of them due to early drought than we lose in consequence of belated frosts. The fickleness of the elements must be endured as their behavior is not a matter for us to attempt to regulate.

## The Automobile Solves Many Problems

"When we kept a horse and outfit," says a farmer who now owns an automobile, the expense of maintenance was more than a dollar a day right here on the farm.

"The horse had to be fed three times a day. It had to be groomed and exercised every day, whether we wanted to use it or not. Trips to the blacksmith were frequent. Expense was never-ending. Added to this was our sympathy for the poor horse in very hot and very cold weather. Thought of our own comfort finally led us to purchase an automobile.

"Immediately our eyes were opened to the greater economy of the motor-driven vehicle. It did not have to be exercised. It cost nothing when not in use. The upkeep was far less for a vastly greater amount of work than that of the horse. The car was always ready to go anywhere at any time and get us back home again regardless of distance at fine speed. Where formerly a 20-mile drive was a hardship for the horse and ourselves, our automobile makes easy work of 100 miles in a day. And we ride in perfect comfort.

"When we see our neighboring milkmen, butchers, fishermen and farmer friends speeding about on their trading errands in motor cars, doing their work quickly and covering much greater territory in less time and with less effort and expense than ever was possible with horses, we congratulate ourselves on buying our trusty automobile. We wish we had realized its value long before we gave up our horse. We cannot look on the modern, practical, reasonably-priced automobile as a luxury. It has become the farmer's necessity for work and pleasure. Every farmer should own one."

## The Apple Harvest

The time is now at hand when the winter apples must be gathered. Some of them will be stored for home use and the rest sold or put in storage for sale later. The stage of maturity at which each variety should be gathered is one of the important things to know. This cannot be given as occurring at any fixed date but varied with the conditions of the seasons. It has been learned from experience that winter apples be taken from the trees too early and too late for good keeping. If too immature they will lack flavor and color and are far more subject to "storage scald" than if allowed more time on the trees. On the contrary, if the apples are left too long before picking they are sure to decay easily and will not keep as they should. Well colored but yet firm in flesh is their proper condition for the best quality and keeping as well. Be sure to observe closely and act on this plan. There are some kinds of apples that will endure rather rough handling but it is very needful to handle all of them carefully if they are to keep well. Every bruise is a blemish and a skin puncture will start decay at an early stage. Pulling out the stems will nearly always tear a hole into the flesh. Breaking off scraps of wood attached to the stems is also a bad practice for they are apt to punch holes in the skin of all that they touch.



Green's Fruit Grower's artist teaches in this cartoon that a dollar invested in fruit trees may mean \$1000 later on. This would seem to be an exaggeration unless we shall realize that the success of the first dollar leads to a larger planting of vines and trees.

## Canes of Raspberries

The old raspberry canes are generally left to be cut out during the winter weather or spring, but in many cases we find it preferable to cut them out immediately after the crop is harvested. The canes are easier to cut than if left when dead and dry, and by removing them at that time we destroy many insects which are often on the canes at that time of the season. When cutting out the old canes, we really rid the patch of many insects and destroy many diseases which would otherwise attack the young shoots that grow up during the growing season. As a rule, the heading back of later branches should be left until spring. They should be allowed to grow undisturbed during the growing season. We should judge by the strength and growing habit of the plant how high we should top it. But as a rule, we cut back twelve to eighteen inches. Topping raspberry canes during the growing season produces weak, sickly looking, secondary laterals, or side branches.

## Strawberries and College

Arguing from any process of reasoning possible, strawberries and college are a long way apart in the scale of life. A young man of Polk county, Iowa, has found that they are very closely allied. In fact, he has found in the one the means of enjoying the other. In short, he is earning his way through college largely through his acre of strawberries, says Farmers' Review.

He has been raising strawberries rather extensively now for over five years, and his little plot has been developed to a remarkable extent.

His source of revenue is derived from the sale of early berries, hardy plants for propagation and fancy stock for nurserymen and dealers. His love for the plants has caused him to experiment extensively, and his neighbors affirm that he is a coming Burbank.

I cannot contentedly frame a prayer for myself in particular without a catalogue for my friends, nor request a happiness wherein my sociable disposition doth not desire the fellowship of my neighbor.—Sir Thomas Browne.

## Value of an Apple Tree

The value depends on the variety, location, nearness to market, the number of trees, size of the farm they are on and many other things. A Baldwin or Spy ought to be worth more than a Ben Davis, says Rural New Yorker. The trees may be near a town, and a smooth hard road, or back among the hills where the roads are rough and soft, and market distant. The trees may be in a place where thieves abound, or on soil not well suited to apples. It may be possible to sell the fruit at the door, or perhaps it must be shipped far. There may be enough trees to give a man a full business or only a few—hardly enough for a side line. They may be in a small field by themselves or on a good-sized farm which would give a man a full business.

All these things and more will affect the value of the trees. You might ask us to name the value of a well-built house 30x35 feet. We could not tell until we knew how it was located. It is much the same with an orchard. In cases where trees have been destroyed by fire near railroads, settlement has been made by figuring a yearling tree at one dollar and adding 50 cents for each year of thrifty growth. Our young trees 10 years planted would be valued at \$9.50 each at such figuring. We would not accept any such price. McIntosh trees at nine years give us nearly \$2 worth of apples, while Baldwin of the same age has hardly begun to bear. We call our own young trees worth \$15 each. With 42 to the acre this means \$645. They are worth that and much more to us, yet it is doubtful if anyone would pay that money for them as an investment.

## Summer Pruning

The cherry and the pear both bear fruit on short spurs. In trimming therefore the effort should be to produce a large quantity of healthy fruit spurs. Summer pruning does this admirably. The branches that we want to remain as leading shoots should not be touched; but the weaker ones may be pinched back about mid-summer, one foot or two-thirds of their growth. This will reduce the swelling of a number of buds that will produce flowers instead of branches and in this way fruit spurs can be obtained on comparatively young trees. With such plants as the grape vine, the fruit is borne on the branches of last year's growth, so the effort should be to throw all the vigor possible into those growing branches that we want to bear fruit the next season. To do this, we pinch back the shoots that we do not want to extend; or even pull these weak shoots out altogether. A little pruning is then necessary in the winter to shorten back these strong, bearing canes, or to prune out altogether the weaker ones that we check by pinching back during the growing season.—Field and Farm.

Advantage of fall planting. Trees, plants and vines properly planted in autumn survive our winter and are in better condition to make an early start in spring than those planted in the spring, after waiting for the ground to become in suitable condition for working, then preparing it and planting. The fall planted will be in much better condition to withstand the almost certain droughts of summer than the spring planted. A light mulch of well rotted manure, spread over the roots will help in resisting the effects of excessive cold and do good to the plants.

The grape is nearly as ancient as history itself. When we read about the "apple" with which Eve tempted Adam, we know not for certain, whether it was literally an apple or whether it applied to some other fruit, for perhaps the term apple might have been indefinitely applied to many kinds of fruit. But when we read that "Noah planted a vineyard and made wine with which he was drunken" we know that the grape can be traced at least thus far into antiquity. No fruit is more refreshing and none more healthful than the grape. Among the fruit most valued by the rich, no fruit is so emphatically the poor man's fruit as the grape. Whoever owns a house with a strip of land three feet wide around it, may produce an abundant supply.

## The Orchard and Fruit Garden in September

Currant and gooseberry bushes come into leaf so early in the spring that they should be planted in the fall. Get your order in now. Also make cuttings for home propagation.

If you have neglected to cut out this year's bearing canes from raspberries and blackberries, do it now. Apple and pear trees that have been grafted should be carefully looked after. Fresh exposed cuts or broken barks should be covered with grafting wax or paint.

Trees and shrubs should have immediate attention when received from the nursery. Remove them from the crates, cut the bundles apart, and unless you are ready to plant, "heel in" where water does not stand. "Heeling in" means digging a trench and covering the roots of the stock, working the earth in well. Stock cared for in this way may be left for a week or more. In cases of necessity, nursery stock may remain "heeled in" all winter, but such cases require careful covering. Where this is necessary with peach trees they should be covered completely.

Plow newly planted orchards to get rid of grass and weeds.

Make a frequent round-up of the place to destroy the worms' and caterpillars' nests.—F. H. Sweet, Va.

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## Grape Growing for Pleasure and Profit

(Continued from Page 1)

under special treatment, chiefly because of the insect pest called phylloxera that troubles the roots very seriously. But on the Pacific slope it does not exist and the choicest of the grapes of ancient history and those of modern origin flourish in the greatest luxuriance. It is a matter of almost no trouble whatever to grow all the grapes that may be needed for home use there and there is scarcely a country place that does not have a few vines growing and bearing their luscious clusters of fruit. The vineyards of California are noted for their immense size and productiveness and there is considerable done in the way of growing grapes of both the vinifera class and those of our American types as far north as southern British Columbia.

In all the regions east of the Rocky mountains every home may be supplied with an abundance of grapes of the native species. Although the foreign grapes will not flourish, for the reason before stated, there is a wealth of native species from which there has been produced by crossing and painstaking selection of seedlings, a race of grapes that takes high rank in the horticultural world. Some of them are accidental seedling crosses with the Old World grapes but the most of them are the result of careful breeding and selection by those who had both patience and foresight. Their memory will go down in history as among the benefactors of man, in taking from the wilds of nature the vines that had been rejected by the early pioneers of American grape culture as worthless and originating from them thousands of varieties that are thrifty and productive in vine and delicious and beautiful in the fruit they bear.

Among all the grapes that have a place in the vineyards of America there is none that equals the Concord for general utility. It came from the wild New England "Fox" grape and stands a living monument to the perseverance of Ephraim Bull, of Concord, Massachusetts. Blessed be his memory. There are more deliciously flavored grapes and some that are more beautiful to look upon but none that so combine all the good points of both vine and fruit for common use. It has numerous descendants, straight and from crosses made with various species and varieties, that are among our best kinds for general culture. Among these are Worden, Niagara, Campbell, Moore's Early, and many more. All these are worthy of a place in a family vineyard. Delaware is one of the best of all grapes, foreign or domestic. It is not so vigorous in vine as some but it is hardy and productive. The bunches are rather small but compact and of a delicate red color. Brighton is another red grape of the highest quality. With these varieties planted and well cared for no family need be without grapes from early to late.

## Trees for Fence Posts

Mr. W. H. McCormick calls my attention to the planting of trees, which trees shall take the place of fence posts. This is a subject which has not received enough attention. A tree can be more easily and inexpensively planted than a fence post. The tree planted as a fence post will last much longer than a fence post and do better service.

Though quick growing trees like poplars are especially desirable when planted as fence posts, almost any kind of tree is suitable for this purpose. Even apple trees could be planted along the lines where fences are desired. When these apple trees are of sufficient size, a stick of wood two inches wide by one inch thick or larger could be nailed to one side of the tree and a wire fence attached to this wooden strip. These apple trees would not only furnish a basis for a substantial fence, but would bear fruit for a lifetime.

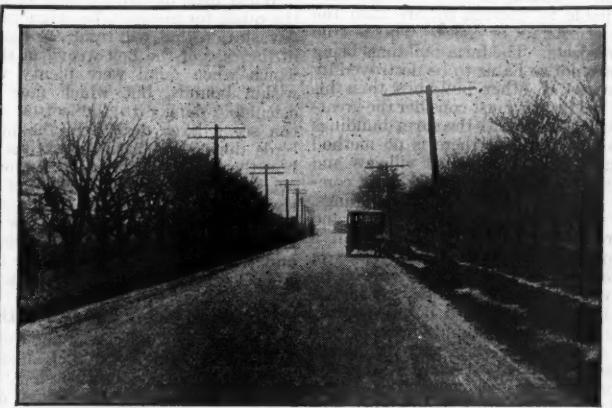
No well informed ruralist will think of spending time and money in building stone walls or even board fences, and certainly not rail fences. Such fences as these belong to a past age. My opinion is that the farm should have no interior fences, but that all fences should be confined to the borders or lines of the farm. It is expensive keeping up farm fences. They are continually running down. It requires a large investment in the first place and labor is constantly necessary to keep them in repair. It costs the average farmer about \$100 per year to maintain interior fences. My opinion

is that it is more profitable to do away with these interior fences, cutting green fodder for the stock each day instead of turning them out to pasture. An exception might be made of certain low lands which are valuable only for pasture and which could be fenced in with wire fencing.

Consider for a moment the beauty of a farm where trees are planted ten to fifteen feet apart to take the place of fence posts. I urge upon every reader of Green's Fruit Grower to consider this question of planting trees for fence posts, for it is an important question to consider and discuss.—C. A. Green.

## Do Not Blame the Cat for Everything

Green's Fruit Grower: Much is said of the cat in regard to decrease in bird life, but few really know why this decrease is. Statistics inform us bird life is disappearing from the United States and Canada. W. T. Hornaday, director of the New York Zoological society, showed in his compiled report in 1908 a decrease of birds in the past fifteen years of 40 per cent. During the



A sample of the beautiful improved roadways in the outskirts of Rochester, N. Y., through the apple districts.

winter of 1907-8, more than a million robins were slaughtered in the state of Louisiana and shipped to market for food purposes. Have we no laws to protect birds in the South? If not, it is time we look to it, for they are slaughtered by thousands in the rice fields. What must be the record of the other southern states. If we had no bad boys, vain ladies or cats, what would our care of the birds amount to in comparison to the slaughter going on in the South. Always doctor the cause and in this case don't lay it to the cat.

As to stray cats, how could it be otherwise when folks are so superstitious they won't take the cat along when they move away and for the same reason won't kill it, but these same ones can abuse cats and other dumb animals. There is no ill luck for abuse. Poor, ignorant, deluded mortals! Some things do seem so unreasonable and unjust that it almost seems as though we had not advanced much in civilization. Feed your cats and they won't bother birds. Their Friend.

## Will Beautify New York State Roadsides

By investigations just completed by the New York State College of Forestry at Syracuse, it has been found that nine-tenths of the roadsides in the rural districts of New York State are entirely void of shade trees. When this is considered along with the fact that last year New York State paid out of the State Treasury about \$30,000,000 for the construction and maintenance of road beds, it shows that the state is not yet awake to the great need and the great possibilities in rural roadside improvement.

A preliminary survey has just been made by H. R. Francis in charge of the Landscape Extension work of the College of Forestry.

During the survey studies were made of such important features in rural roadside improvement and beautification as good and bad varieties of trees found along the highways, views and vistas obtained from the highways, the effects of the shade trees on crops in adjacent fields, the possibilities of the covering of barren embankments and the planting of some desirable sort of vegetation where overhead wires are in large numbers. One of the principal features studied was the condition of the roadbed as affected by the presence or absence of shade trees.

Few people in the State will be able to visit the wonderful National Parks of the West but an increasing number of people will own automobiles and use the highways of the State. Many if not all of these highways may easily become State Park Ways of beautiful trees and shrubs. Trees grow like weeds under the climatic conditions existent in New York and with varied scenery of intense interest the highways of the State will eventually become as beautiful as those of any other State in the Union.

## Around The Farm

After the strawberry beds have grown two crops, plow it up and set out to cabbage.

Always plant small fruits on deep rich alluvial soil, one which carries plenty of humus.

A mass of vines running over a pile of debris in the back yard is a thing of beauty, while the litter it covers would probably be an eye sore to the landscape.

The best way to clean up an orchard after the fruit has been picked is to turn on the sheep. They will dispose of every windfall or apple that has been overlooked by the picker.

Plenty of stable manure, cultivation and judicious pruning will almost without exception bring back to bearing the old orchard that seems to be beyond hope.

Gooseberries may be grown with profit in almost any section of the country, except in the extreme south, where the climate is too warm for the plants to succeed.

Currants are a profitable crop. They grow in almost any soil and bear well. But to produce large sized fruit and in profusion they require a deep, rich, well mellow and naturally well drained soil.

Grape vines planted in early November after the wood has well ripened and matured, makes a stronger growth than when planted in the spring. You had better take the precaution to mulch heavily each vine so planted.

The most appropriate time to plant an apple orchard is in the fall from about the last of October to the middle of November, when the ground is loose and moist enough to work well, but not wet and sticky. At this time the growing season is over and the trees will hardly be injured by the change from nursery to orchard.

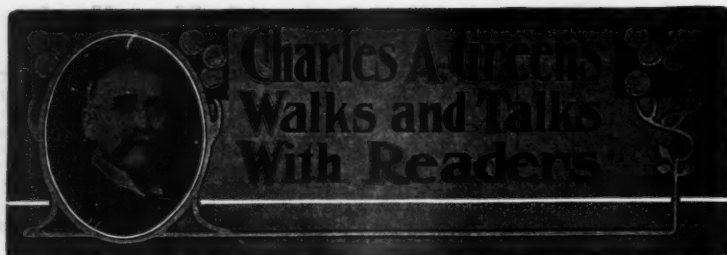
Home grounds whether in the country or city, are incomplete without vines

New Zealand offers a good opening for American ready-made clothing.

Sound travels through dry air at the rate of 60 feet per second; through water at 240 feet per second, and in steel wire at 17,130 feet per second.



Fruit on a young peach tree in the garden of our former contributor, Calvin Forbes of Michigan, who died recently. Perhaps our readers will recall that we published not many months ago a photograph of Calvin Forbes.



### Why are Apples, Nuts and Other Things Roundish in Shape?

If we look out upon the sky at night we will see that the myriads of stars and the moon are round. If we observe other natural objects we will see that many of them are round or roundish. The earth and the sun are round. Why should the preponderance of nature tend to be round or roundish? I am not a scientist, but even if I were and would attempt to explain this mystery you might be no wiser after the explanation. Scientists would answer the question by telling you of molecular attraction and of the law of gravitation acting toward a center.

Drops of rain and hail stones are round. This fact has led to the making of shot and bullets for guns by allowing drops of lead to fall from a tower through the air. These drops quickly form into small globes. They fall into water and at once harden into round pellets or bullets, just the same as rain drops and hail stones form and fall. The roundness of stones and gravel is caused by friction with other stones. A big rock, weighing many tons, starting from the arctic regions on its journey of thousands of miles southward, in a block of ice thousands of feet thick, may before the end of its journey be whittled down to a round stone no larger than your head.

But there are other reasons for the tendency toward roundness as is evidenced in the new worlds which astronomers find in process of making. The material of which these heavenly bodies are being constructed is in spiral motion. The whole mass is full of activity round a center, the outskirts of which must be curved to roundness. Our earth was doubtless in a similar condition in remote ages and this accounts for the earth being round.

Apples, peaches, plums, grapes and the bodies of trees are roundish owing largely to the fact that in growth the fruit pulp or wood expands on all sides from a common centre. Further than this it would seem that the Creator deemed it wise that many things should be round. Hogarth has said, "That the curved line is the line of beauty in art." We might claim that it is the line of utility.

### Winter Pears

Pears are unlike apples inasmuch as pears have not the keeping qualities that apples possess. While it is possible to have apples in eatable condition upon your table all the year round, beginning with the earliest harvest apple and ending in July with the long keeping winter apples, we have no pear that will keep all the year round. Sometimes the Anjou pear is mentioned as a winter pear. I saw it recommended lately as keeping up to Christmas or into January, but I have not been able to keep it so late in the season with ordinary or rather better than the average cellar treatment. With me the Anjou in my cellar begins to ripen in November and will not keep far into December, and yet of course in cold storage they can be kept much longer.

The Bosc is considered one of the best of pears in quality and of beautiful shape and color with long neck and stem. The general impression is that the Bosc is a long keeper, but I have not found it so. With me the Bosc ripens but a little later than the Sheldon, which is a fall pear. While the season of ripening varies in different years, with me the Bosc and Sheldon begin to ripen in October.

Clean, cold storage has done much for the early pears or those moderately early, such as the Bartlett. In past years when the Bartlett ripened it was forced onto the market and sometimes brought only moderate price owing to the warm weather at the season of the Bartlett's ripening, but now with the cold storage of large cities the Bartlett pear can be kept for months and dealt out to the market as wanted without loss and with greater profit than formerly.

Lawrence is a winter pear, as is Winter Nellis and Josephine. There are few planters who desire winter pears, hence nurserymen do not find that it is pays to propagate them. Some have trouble in ripening winter pears.

### Fire Prevention on the Farm

Generally speaking farmers feel that they are less liable to damage by fire than the residents of villages or cities. This is true in some respects. The farm buildings being isolated are not so liable to be destroyed by conflagrations of other buildings than his own, but the farmer must consider the greater risk which occurs to the farm buildings owing to the fact that there is no method of extinguishing fire such as villages and cities possess, also that there is more combustible material around farm buildings, such as straw stacks, strawy litter and shingle roofs, which would ignite with a spark from a pipe or cigar. The cost of insurance on farm buildings used to be remarkably low, but of late years such insurance has been increased in price owing to the fact that farm buildings are now considered greater risk than city buildings.

Any farmer or farm workman who smokes a pipe or a cigar is an element of danger around farm buildings. I have known men smoking a pipe or a cigar to enter a stable, the floor being covered with straw, and indulge in smoking while rubbing down the legs and bodies of horses brought in sweating, and yet one would think that no one but a crazy man would commit such an act. I once knew a cautious farmer who came very near burning his buildings. He would not allow himself to enter a barn with a cigar in his mouth, therefore he placed his cigar on a plank outside the building. Later he forgot all about his cigar until he heard an alarm and found that the straw around the building had been set in flames by the cigar rolling off from the plank.

Farm buildings are more liable to be injured by lightning than village or city buildings. While the writer has aimed to be exceedingly careful as regards fires, he has on several occasions met with serious losses and on other occasions has come very near being burned out. Spontaneous combustion is something that should ever be considered. Never allow oily or greasy rags or kegs containing paint to accumulate in or about the buildings. At Green's Fruit Farm one night the superintendent happened to see a light in a large building costing \$8,000 or \$10,000. He found that after painting wagons, oily and greasy paint covered rags were thrown into a barrel partially filled with sawdust. Spontaneous combustion had resulted, but the fire was extinguished before it did much damage.

Defective chimneys or chimneys that do not come down to the ground, making it necessary to have stove pipes go through the ceiling above, are often the cause of fires.

### The End of the World

The Bible tells us somewhere that the earth will not be flooded for the second time after Noah's flood, but that it will be destroyed by fire. The earth is so substantial it has continued through many million years and is likely still to continue, but there are dangers to the earth greater than fire or flood. I have in mind the danger of the increasing number of insects. Insects increase in a manner but little understood by the average individual. It is possible for one insect in a season to increase to millions. One insect may bring forth thirty or more broods in one season. It is possible for insects to increase at such a rate that every green thing on the face of the earth will be consumed, leaving nothing for mankind, who of necessity, would perish.

Nature has peculiar ways of doing things. The affair if done by man would be colossal and yet nature brings it about with ease. Such is the case with the irrigation of the

world by water lifted to the skies in vapor and then borne over the continents by the winds or breezes, thus performing a service that could not be so successfully done by the investment of billions of dollars and the labor of countless armies of men, machinery and draft animals. Nature has provided protection from the impending scourge of insects by providing birds that delight and thrive in feeding upon these insects. Different insects have different enemies in the way of birds. The swallow, darting here and there high up in the sky, will feed on different insects from the bat, which we are told feeds largely upon mosquitoes. The robin feeds on different insects from the sparrow or the woodpecker. Birds no larger than the end of your thumb busy themselves from morning till night closely examining with the sharpest eyes every part of every leaf and both sides of the leaf, day after day during their lifetime, destroying insects or the eggs of insects.

When man destroys a race of birds like the quail, for instance, he is ignorant of the devastation that will result, or has resulted in the case of the boll weevil in the south, which when quail were plenty was kept within bounds, but which now does incalculable damage to the cotton fields. I can see a large decline in the number of birds during my lifetime. When I was a boy the swallows flocked about our barns, every eve on the roof being full of mud and straw nests and full of the young birds hatched therein. I see but few of these swallows of recent years. The phoebe bird and the bluebird were far more numerous when I was a boy than at present.

### What Nebuchadnezzar Did

The historian tells us about the wonderful achievements of Nebuchadnezzar. He subdued Syria, Judah, Jerusalem, Tyre and Egypt. He restored the ruined canal and made an artificial lake ten miles in circumference and founded the city of Terebon. He built the Median wall. He built hanging gardens such as were never seen before, completing the work in fifteen days. My thought is to deny these achievements of this barbarous king. That which Nebuchadnezzar has had the credit of doing, as enumerated above, was in fact accomplished by possibly a million of his subjects over whom he had gained control, much the same as warring nations at present control their citizens. Without the aid of the common people who in ancient times were compelled to do as bidden by the rulers, the kings of history would be powerless to achieve much of anything. How often are we told of the wonders of the pyramids and of the kings who built these useless monuments, whereas as a fact the builders were slaves forced to do their work under penalty of death. The king who was given credit never lifted a finger to the building of the pyramids. This country of ours is the first in the history of the world which has given humanity, the common people (and the common people are the ones who accomplish the most), the nearest approach to their rights.

### Meteors Often Fall Upon Us; Are Not Felt

Meteors are little worlds which, like the earth and other planets, move in orbits of their own around the sun. There is an intimate connection between meteors and comets—just what no one knows—but it is thought that meteors may be the fragments of a comet. At any rate, it has been discovered that certain swarms of meteors move in the same path as do certain comets. In the course of the earth's journey through space, we run into swarms of these little worlds each year. They cross the field of a telescope at the rate of about six per hour. One would naturally suppose, therefore, that people on the earth would be constantly in danger of being struck by meteors.

The fact is that comparatively few meteors ever reach the surface of the earth and still fewer have actually been seen to fall on the earth. When a bullet is shot from a gun it sometimes gets so hot that it scorches the target at which it is aimed. It has been proved that the heat is due not to the explosion of the gunpowder, but to the friction caused by the swift passage of the bullet through the air, and in general, any such body becomes heated when it pushes against resistance. This is just what happens to the meteors. When they strike our atmosphere at the rate of 35 miles a second at which they are moving, they usually

burn up before they reach the earth. All that is left of these heavenly visitors is "star dust." This falls everywhere, so that even on a steamer in the middle of the ocean the furniture has to be dusted. It is likely, therefore, that we have had meteors fall upon our heads without knowing it. No one thus far, however, has enjoyed the distinction of being killed by a meteor. How different would life be on the moon, where there would be no atmosphere to protect us!

### Love for the Work

There are few editors who fail to advise their readers that they should not take up the occupation of fruit growing unless they have a love for that kind of work. This is good advice but it should be carried further. The truth is that we should not take up any vocation hoping to succeed largely unless we have a love or tendency in that direction. Supposing a father desires his boy to study law and the boy consents reluctantly, having no special love for the legal profession. This boy will find the reading of law books exceedingly dull and wearisome. He will take no pleasure in discussing legal affairs with his clients or with his brother lawyers, and will take no interest in the acts and decisions of the various courts. This boy is apt to make a poor lawyer. The same is true of a physician. If the boy begins to study medicine without a love for it, he will never accomplish much in caring for the ills of humanity and building up a reputation and in securing a competency. Most wretched of all must be the clergyman who has taken up that profession as his life work without any definite idea of benefiting humanity or of becoming eminent as a pulpit orator and church worker.

It is a wise provision of nature that we do not all have the same talents or inclinations. The diversity of talents and desires leads each individual into his particular sphere of life, in which he seems to be comfortable and well satisfied, though others wonder that such should be the case.

### The Shadow of a Man

When we hear of a successful enterprise, whether it be a railroad, a mine, a department store, a farm or an orchard, we do not always remember that behind each of these successful enterprises stands conspicuously in the sunlight a man. Some one individual has in most instances been the starting point of every enterprise. When this man passes away or is disabled the enterprise is likely to lag in interest and profit. How much of himself, how much of sacrifice, hard work and persistent hammering, and sometimes of drudgery, this individual has experienced in starting his enterprise the world will never know. All the world sees is the completed structure.

It has been said that it is more difficult to invest money safely than it is to make money, owing to the fact that we are masters of our own business, know about all of its details and have learned how to make money thereby, but the investment of money is a new enterprise, new business for us, therefore here is where we are likely to fail, but if we know something or can learn something of the shadow of the man behind the enterprise in which we think of investing, here is an element of safety, for everything depends upon the management.

We all think that we desire to give and to receive the plain truth about the various affairs of life, but my opinion is that on many subjects we do not desire the truth and would not be pleased with it. This would be the case in regard to plain truth being told in regard to our personal appearance or dress or manner and that of members of our families. There are questions of politics and religion which few speakers would dare to state upon a public platform through fear of giving offense. Then the question arises, What is truth? Error has been offered us as truth in many of the affairs of man for thousands of years without correction. Truth has come to mankind through long suffering and tribulation. Advances in thought, in invention and progress are from those who could not see the truth but who meant well and desired progress. By the words plain truth is doubtless meant truth that is obvious or clearly discernable. We shall probably never learn the truth as regards the immensity of the universe, its origin, the causes of its birth and its final catastrophes.

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## Makes \$1,500 a Year Profit from 10 Acres of Hilltop

Six years ago when Emil V. Heller, of Jackson county, Indiana, invested \$335 in ten acres of rough and only partially cleared poor land, on the top of a steep hill, five miles from the railroad, his friends shook their heads, and sadly admitted that he was a fool of the first degree, says The Farmer's Guide. Last year the net profit from this ten acres was approximately \$1,500, and these same friends are proudly pointing Mr. Heller out as "one of our most progressive, and far-sighted young farmers."

"Have you seen Heller's peach orchard?" is one of the stock questions put to visitors in this neighborhood during the summer months. Figures kept by Mr. Heller during the six years show his original investment in land and trees has paid an annual average interest of 85 per cent, and the returns are just beginning to come in. Of the original ten acres he has four acres in five-year peach trees, four acres in four-year peach and apple trees, one acre in one-year peach trees, and one acre in five-year cherry trees. Results have shown that the greatest profits lie in peaches, although plums and cherries both do unusually well, and at the end of this season Mr. Heller purchased 17 acres adjoining the original tract, which will be devoted entirely to peaches.

On my first visit to the orchard I found Mr. Heller on his knees digging out the borers with a sharp knife. "If I can keep ahead of them, they will never get ahead of me," was his greeting, and I have since observed that this remark is characteristic of his whole success.

"How did you come to start an orchard up here," I asked.

"Because I always noticed as a boy that the old scrub trees scattered over these hills always had peaches on them, even when the fruit in the surrounding country was winter killed," was the prompt answer.

"I never liked general farming," he continued, "and I can't get along with livestock at all, but I have always been interested in fruit growing. I read all I could about the small fruits and especially about peach culture. I visited one or two of the most successful growers in the state, and then I came up here and started in."

The ten-acre tract is decidedly broken up, and follows the contour of the ridge of hills which has an elevation of about 200 feet above the surrounding country. The soil is a whitish clay loam showing considerable acid reaction and is lacking in organic material to a marked degree. To a certain extent this has been overcome by cover crops of cowpeas. Three and one-half acres of the four-year old peach and cherry orchard lie on a steep hillside and have been cultivated with a grubbing hoe and scythe. This tract produced good fruit, but is so difficult to handle, that no more trees will be put out on this kind of land. The more level land has been cultivated each season

with an extension, reversible, cut-away disc harrow, with the exception of the third season, when tomatoes were grown as an inter-crop, which paid for the cultivating that season.

"I don't believe that the inter-crops will pay me," said Mr. Heller, "because my land needs all the fertility I can conserve for the heavy fruit crops and the proper development of the trees."

Each spring trees have received a heavy application of lime sulphur spray to prevent scale, and fungous diseases. They present an unusually thrifty appearance and have made a strong growth each season. The bearing trees have produced two heavy crops in succession, and are heavily loaded with buds again. During this time the trees in the lower ground have only fruited once.

"I believe that I have the altitude and air drainage which will give me a crop every year," said Mr. Heller, "and I expect to make money by having peaches when the other fellow doesn't. The Elberta has given the most satisfaction," he continued, "although the Carmen and Early Crawford have both yielded good returns."

"Ripe peaches from June 20 to October 1" is his boast. And so far he has been able to back it up. In addition to the above named varieties he has, Mayflower, Greens-bow, Triumph, Crosby, Globe, Snow Cling, Smock and Salway, and is supplied to meet any demand for color, quality or flavor.

The following figures tell the story of the orchard for the first five years:

Cost of orchard land .....	\$ 335.00
Cost of nursery stock .....	120.00
Labor and spray material .....	348.29
Fertilizer .....	25.00
Labor in harvesting peaches .....	153.00

Total expense .....	\$ 981.44
Income, inter-crop and peaches 4th year .....	\$ 188.00
Sales of peaches 5th year .....	1535.15

Total receipts .....	\$1723.00
Total expense .....	981.44

Total profit .....

\$ 841.56

This at the close of the fifth season left the owner with a good young orchard, only part of which was of a bearing age, and all the land, labor and expenses paid, and a neat sum of \$841.56, in addition to rosy prospects for the future.

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Green's Fruit Grower Co.—Your paper is certainly worth the price without any premiums and it is the best one that I know of for information on Small Fruits.—F. D. DeVitt, Colo.

I think Green's Fruit Grower is the best fruit journal published.—F. F. Conley, Ky.



BLIND MILTON DICTATING TO HIS DAUGHTER  
From the original by Munkacsy, in New York Public Library

## The Vision of the Blind

"Thousands at his bidding speed,  
And post o'er land and ocean  
without rest;  
They also serve who only stand  
and wait."

Was the spirit of prophecy upon John Milton when, more than two hundred and fifty years ago, he dictated those words to his daughter?

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2 1/2 Annual  
EVERY BEARING FLOODED WITH OIL

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Fruit farms



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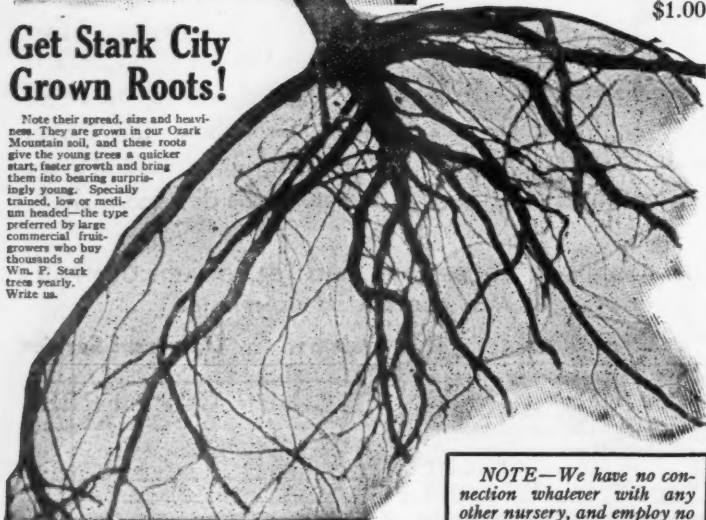
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Please mail me your 160-page catalog. I am interested in following number of trees:

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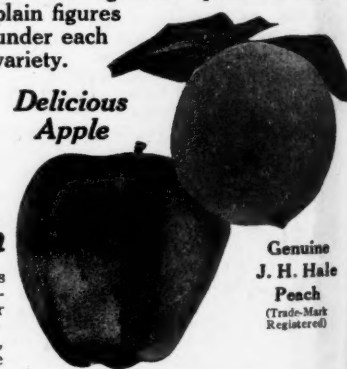
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Dr. Dempster of celebration a the attention be ed wound cause when received, of the finger, n examination, m is evidently inc which Dr. Dem

### Feed the Orchard

It has been demonstrated to the entire satisfaction of all who own manure spreaders that a top dressing on the meadow and pasture produces increased crops of hay and grass. It has also been shown that it pays to feed any crop or any animal if good results are to be obtained.

Has the orchard played out? Has it begun to weaken and give way to the ravages of insect and fungus pests? Has it ceased to produce profitable yields of good sized fruit? If so, the chances are that you are starving the trees. Fruit trees need food and care the same as other plants. Neglect means the same loss—no, it means greater loss than to any other crop. If you starve a corn or oat crop, it can be remedied at any time in one year. They are annuals. But when you starve the orchard and weaken it till it is killed by its enemies, it takes years to grow another, however rich you may make the orchard soil.

When a tree produces ten bushels of apples it has got to have the plant food in abundance. And to go on year after year bearing heavily you can readily see how easily the soil in its locality is exhausted of available food. Weeds and adjacent trees are likewise taking from the soil that which this tree needs, so it stands to reason that orchard trees need to be manured liberally. A large poultry man in Connecticut kept his flock penned in the orchard. He picks the finest apples from those trees seen in that section. They have a different flavor than others of the same kind. They are earlier and larger than those receiving ordinary care. The only reason is that the poultry fertilize the trees and keep the insects off to a large extent.—Exchange.

### Stay on the Farm

If a young man is well established on the farm, is making fair progress, he should not for a minute consider going to town, for it will be a mighty hard pull to pay rent, light, heat, support the family on his wages, to say nothing about getting ahead, says Farmer's Guide. A young man who received between \$300 and \$350 on a farm tells me he has more at the end of the year by working in the country than he did in town at \$65 the month. He has his horse free, his cow kept, his garden spot, and his house rent, and is money ahead.

So stick to the old farm, and when a Henry Ford offers \$5.00 a day to work in his automobile factory, don't hike to the city to get stranded like several hundred young men in Michigan have done recently.

### The Czar is Rich

As head of the Church he owns all of the church property of the realm, amounting to billions. But that can be left out of consideration. He owns in his own name a hundred and fifty million acres of land, and upon this land are the most magnificent timber, the most colossal mines, and agricultural lands enough to furnish food for a nation of people. The State, or Government, pays him a salary of ten million dollars a year; and if he wanted more, all he would have to do would be to sign an order demanding it, since he is the State himself, in a sense.

The Czar pays his own expenses. That is, he maintains his own palaces and royal residences, some one hundred in number, and takes care of the cost of the households of all of the royal personages of the nation. This involves some thirty thousand servants, three hundred automobiles, five thousand horses, and a small army of soldiers and secret-service men. So it is necessary that he have considerable income.

All of the mines of Siberia are owned by the Czar personally. He gets a royalty upon every ounce of mineral that is mined. The agricultural lands are rented, and the forests are being worked up into timber, which must be accounted for. So no matter how the war terminates, unless Germany is able to overrun Russia and take the entire country, the Czar isn't likely to suffer from the heat in summer or the cold in winter.

Dr. Dempster says that pain is a matter of cerebration and is much more severe if the attention be directed to it. An unexpected wound causes comparatively little pain when received, while the anticipated prick of the finger, necessary to obtain blood for examination, may cause real agony. Pain is evidently increased by the imagination, which Dr. Dempster believes accounts for

its greater severity at night than during the day.

A geologist points out more striking illustrations that may be seen in the works of Nature. Could we stand upon the edge of a gorge a mile and a half in depth, that had been cut out of the solid rock by a tiny stream scarcely visible at the bottom of this terrible abyss, and were we informed that this little streamlet was able to wear off annually only one-tenth of an inch from its rocky bed, what would our conception be of the prodigious length of time that this stream must have taken to excavate the gorge? We should certainly feel startled on finding that the stream had performed this enormous amount of work in something less than a million years.

### Pruning Peach Trees

In reply to A. C. Fancher of New York I will say that it is desirable to cut back the new growth of the past season in winter or spring during every year of the trees' existence, but it is not absolutely necessary to do so. You can get large crops of peaches without pruning the peach trees at all, but one thing is absolutely necessary, and that is that when you plant a peach tree you must cut off all the branches, leaving simply a straight stick, if you expect your peach trees to bear transplanting with vigor.

### Weak Buds

Editor Green's Fruit Grower: Being a subscriber of your valued paper, I take liberty to ask you for advice through the columns of your paper, for which I shall be thankful.

Two years ago among other trees I planted two Lombard plum trees which were growing very nicely, but this spring, though both trees are apparently doing well, one is somewhat affected in that several branches on one side seem to have weak buds, as the leaves shot out just a little and then began to turn brown and upon touching them the whole bud drops off. The terminal buds of the same branches seem to be normal but this weak growth is on the middle of the branches. Many of the buds on the branches in question did not shoot out at all. Can this trouble be on account of some serious disease or is it perhaps on account of the hard winter we had? My Elberta peaches, pear, quince and cherry trees received the same amount of winter protection and all are in good condition except one quince tree which was badly damaged by the weather as only a part of the tree budded this spring. All my trees receive good cultivation and barnyard manures are used as fertilizers.

Last summer most of the leaves on the plum trees had turned brown on the tips. I have seen this before on plum trees and perhaps this same trouble is starting on the trees again.

Though I am a reader of your paper only a few years, and have but two lots devoted to fruit growing, I would not be without your paper as I enjoy each new number better than the first.—Frank Polioika, Ill.

Reply: Possibly your trees were injured by severe freezing of the past winter, but if the peach trees went through without injury the plums should have gone through likewise. Sometimes where manure of any kind has been placed in contact with the roots or a portion of the roots of a tree it will induce slow death to the tree, such as your trees seem to be undergoing.

### Picking the Apple Crop

No set rule can be given for the proper time to pick apples, as that will vary with season, variety and distance fruit is to be shipped. As a rule, we gauge the time to pick red apples by their surface color and yellow apples by the color of the seeds. Every grower should study his fruit carefully and learn the proper time for picking, and when that time comes have plenty of help to pick and care for the fruit, says Farmer's Guide. Sometimes two pickings approaches just so much nearer its final maturity and deteriorates in its keeping qualities. Then, again, when a tree is relieved of part of its load it gives the remaining fruit a better chance to become large and well colored. To get the best results, we must handle the apples as though they were eggs, and use every precaution not to bruise, and more especially not to cut the skin of the apple. The apple should be picked by a twist of the wrist, giving

either a slight upward or downward motion at the same time. If picked this way, few or no stems will be pulled out. If the apple does not come readily when this is practiced, it is a good indication that the fruit is not ready to be picked.

When the time comes to harvest your fruit do not try to economize on help, but put a full crew of experienced men in the field and pick your fruit at the proper time. There is no economy drawing out the time of picking. If we will pick our fruit at the proper time, handle it carefully, we will have less culls and more of our fruit will reach the market in first class condition.

Mr. C. A. Green:—Being a native of western New York state and living there near you, long before you became noted in the nursery business, I take deep interest in a copy of the Fruit Grower, the first copy I have seen since I left the state seven years ago. Some friend sent it to me. Several articles written therein appealed to me. One was "How to Market the Apple."

We have the same trouble here with the orange. The growers as a whole are a lot of fools. Part of them see the point, but they have not the force back of them to carry out what they know is the truth. I have done my best to get ten orange growers here, to pull together and put in a packing house of our own, but as I knew the apple business, so I know the orange business. You may write and write up-to-date farming, fruit growing, packing, etc., till your hair turns grey, the ranchman is the softest chump on earth.

As I have always said, there are plenty of people who have the price, any old price, if they are sure of quality.—X. Y. Z.

A farmer in a small way walked into the offices of one of our fire insurance companies and intimated that he wished to insure his barn and a couple of stacks.

"What facilities have you for extinguishing a fire in your village?" inquired the superintendent of the office.

The man scratched his head and pondered over the matter for a little while. Eventually he answered: "Well, it sometimes rains."—Boy's Life.

### The Dog

Who can look on the picture of a good dog without a thrill? What memories of pleasant excursions afield, of purple dawns on upland pastures, the pungent scent and fallen leaves, the golden glow of autumn sunsets and soft, cool winds, a picture by that master of all animal painters, Osthaus, brings to mind. From the dim and shadowy past, when man himself had risen little above the brute creation, the dog was his chosen friend and companion. That is the best compliment that man ever received, or ever will receive. A man that a dog likes is a man that human beings can like, and as a corollary the man that likes a dog is a man worth knowing.

Every dog cannot be a champion. Neither can every man be a president, but he can be just as good a man, and so a dog without championship honors, be he faithful and honest, is as good a friend and as well worth having as the bench of the field winner. If you are fortunate to hold the affection of a friend like this, you are indeed to be envied, for you have passed a test based on an honest deduction.—"Forest and Stream."

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## Farm Department

### Save the Manure

"The farms of Missouri alone produce each year 55,500,000 tons of manure, containing plant food worth \$160,000,000, or more than is paid for all the commercial fertilizer sold in the United States. To put it in another way, the annual manure crop is worth more than the corn crop, so it must be well worth saving. Unfortunately, it deteriorates rapidly, unless carefully handled. Valuable plant food is lost so rapidly from manure if heating and fermentation take place or if the rain water is allowed to run through it. Experiments have shown that at least forty per cent of the plant food may be lost in this way in six months. This amounts to a loss of \$64,000,000 if Missouri manure is badly handled or perhaps of \$80,000,000, since a fifty per cent loss is more nearly what will actually result, according to facts recently secured by the Missouri Agricultural Experiment Station.

"Even under the best of circumstances some loss is sure to occur, but it should be reduced as low as possible. This may be done by feeding under cover on an earth floor, or, still better, upon a cement floor. In the latter case the loss of plant food should be small.

"Probably one other method excels this, and that is one which allows the droppings to be deposited in the field where they are so scattered that no heating or fermentation can take place, and all plant food which is leached out goes directly into the soil. Much of the advantage of this method is lost in case of steep hillsides. In case of dairy cows, hauling the manure to the field daily with a spreader, where this can be done, allows of very little loss.

"After the manure has been scattered evenly and thinly by the spreader or by hand, care should be taken to see that it is worked into the soil by disking or plowing under soon enough, so that it will decay. Undecayed straw in the manure may help to prevent loss by soil washing, but in dry seasons, unless plowed under early, it may leave the soil so open that it will dry rapidly, to the detriment of the crop. A thorough incorporation of manure with the soil well in advance of planting the crop is good practice."—M. F. Miller, Missouri College of Agriculture.

### Agricultural Use of Lime

The use of lime as a fertilizer dates from the inception of moderate scientific farming. Agricultural chemists have shown that there are five or six different functions which lime may perform to benefit a soil, which may be summarized briefly as follows:

1. It is an essential element of plant food.
2. It aids in the conversion of decaying organic matter into humus.
3. It forms compounds with the humic acids which tend to prevent their being leached out of the soil and lost.
4. By producing proper sanitary conditions the growth of injurious bacteria is largely prevented, while the growth of nitrifying bacteria is encouraged. These nitrifying bacteria convert the nitrogen of the humus into such a form that it is available as a plant food.
5. Lime aids in the liberation of potash and phosphorus from inert compounds.
6. It tends to flocculate clay soils, rendering them granular and more porous.

Obviously, permanent results can not be expected unless care is taken to insure the presence of some organic fertilizer at all times.

Lime used alone may be temporarily beneficial but will eventually be harmful; when used with cowpea vines it becomes more efficient for general purposes than almost any other fertilizer. Of course, lime is not beneficial to all crops to the same extent, and not all soils need lime. Thus, some of the common plants which are stated by the Department of Agriculture to be benefited by lime, are spinach, lettuce, beet, celery, onion, cucum-

ber, cantaloupe, asparagus, cabbage, peanut, rhubarb, pea, pumpkin, bean, tobacco, alfalfa, clover, barley, wheat, oats, timothy, gooseberry, currant, orange, quince and cherry. Indian corn is only slightly benefited.

Plants which are said to be slightly injured by lime are cotton, tomato, cowpea, concord grape, peach, apple and pear, and those really injured are radish, flax, blackberry, black raspberry and cranberry.

### Forcing Water to Fill Gullies

J. R. Mattern

It was along toward the end of winter that I went to see a certain farm in Montgomery County, Pennsylvania. Some remarkable stories had come from people who had seen the place, about how the owner had stopped the washing and erosion of the soil, and actually had made the water fill up gullies already formed, by blasting the ground.

What he did was a little like feeding a dog arsenic as a remedy for a dose of strychnine. He actually set off charges of powder in the bottom of gullies, as well as in soil between. There was a peach orchard on the ground when I got there, and the owner showed me the result of his blasting in three stages. Stage one was gullies not yet treated. Stage two was gullies treated the year before, and now almost filled up. Stage three was the places where gullies used to be, but which now was level and even with the rest of the land.

The explanation seems to be that the blasting provided a way for the water underground, and instead of flowing and rushing along the surface, it percolated and seeped through the meshes of the soil like through a charcoal filter for drinking water. Instead of carrying away the earth, it deposited what silt it had with it and inch by inch the surface of the bottom of the gully would be raised by this deposit.

### Helpful Automobile Hints

A bag made of soft flannel is best in which to keep inner tubes. The mouth of the bag should be tied around the projecting valve.

While putting on nuts and bolts it is an excellent preventive of rust to rub on them a little graphite. When this is done, you have taken out an insurance policy against sticking nuts.

Where rubber hose is used to make connections in the water circulation pipes with a gasoline motor, and has bends in it a good plan is to reinforce it by a brass coil spring, which is a good fit inside. This prevents any flattening at the bend and cracking, resulting eventually in a leak.

It is not advisable to use ordinary paint on cylinder casting. A thick coat of paint will prevent radiation. A paint suitable for this use may be obtained at most automobile supply stores.

Care should be exercised in the proper lubrication of ball bearings. Often too heavy or solid lubricant is used. Fluid oil no thinner than the heavier machine oils is very good.



### Learn to Live a Little Every Day

I have known parents who believe they will have more pleasure in life when their children are grown. But after the birds have flown, and the nest is empty, they sadly realize that happiness was within their grasp if they had been able to understand the truth. Life's pathway is strewn with the wrecks of those who not only believed that possession is the source of happiness but also with those who have thought that power and fame, were principal factors in bringing real joy.

### The Call of Yesterday

Written for Green's Fruit Grower By J. M. B.

Without question all the states of the Union will give at least a fleeting glance toward Indiana this year because she will celebrate her centennial anniversary of statehood.

In pageant and song the people will endeavor to portray events of pioneer days that the present generation may at least faintly understand some of the hardships as well as the social side of pioneer life as experienced by our ancestors. If in my kidlet days while I sat by my grandmother's side she taught me the use of the knitting needles and showed me how deftly a spinning wheel could be manipulated, and told me of the loneliness of pioneer life and yet the happiness of a young couple in owning a title to a few acres of God's great footstool, though neighbors were few and miles apart and the gaunt wolf hunger crept nearer the cabin door each day—if I had been old enough to realize that it was history my grandmother was relating to me, I should have asked hundreds of questions aside from those already propounded.

As one of the county chairman I realize the enormity of the task undertaken by the state commission to make a state-wide celebration.

Each county is expected to hold a celebration some time during the season, showing the principal historic events of that county since the date of its organization, and each township through its schools will show the evolution of all occupations in which our ancestors were engaged.

There is the base for building our celebration—the schools. As the common school was the hope of our country a century ago so it is today.

Recognizing this fact we are endeavoring to make the educational feature the prominent one in each celebration. In our particular county we expect to have and keep the pioneer idea foremost. We will have as side issues from the grand pageants and parades, the old time singing school and dancing on the green after an apple paring cutting, then a spelling bee, old time debate, a veritable gypsy outfit, loads of rural families coming to town with women knitting as they sit on chairs in the farm wagons, and many other things of that kind with the participants dressed in pioneer costume. Then too we will have real spinning every day that the present generation may learn something of the task required to make ready the first foot, covering for winter.

There will also be a log cabin built in the court yard with puncheon floor and clapboard roof around which little children dressed in early day costume will play.

And the pioneer mother, God bless her, will be at the celebration too. By the flickering light from the old grease lamp or tallow dip, she will sit in the rude log cabin and knit and mend in the evenings, crooning a lullaby while she keeps the babe sleeping by rocking the trough cradle with her foot. Through the ages she has been calling to the successive generations to not forget the hand that blazed the trail and proved the way, thus making it possible for us to have this celebration.

There is a state-wide movement to erect a memorial to the Pioneer Mother. Each county will contribute to the fund and some time in the late autumn such a memorial will be dedicated.

Throughout the counties historic spots are being marked by tablets with suitable inscriptions and everything is being done that will tend to make the people of the Hoosier state more patriotic, more home loving, better able to recognize that present blessings are enjoyed from past hardships.

endured by a fearless, big-hearted set of pioneer ancestors.

So a pioneer atmosphere will pervade our city for a few days in August, and garments which were worn on our streets three-quarters of a century ago will be worn again, and though a certain degree of sadness will be connected with the celebration yet we will be a better people for having shown this regard to the memory of those ancestors.

The little booklet prepared by George Ade and other Indiana authors inviting Indiana exiles to return to their native state and help in the celebrations this year is enough to make the wanderers pawn their coats or sell their wrist watches, or do some other desperate thing in order to get a chance to tramp the Hoosier hills and drink from the old oaken bucket with old times friends once again.

### Strawberry Culture

Written for Green's Fruit Grower By  
J. P. Giltner, Fruit Specialist

Note articles on strawberry culture in Green's Fruit Grower. We set the plants 12 inches apart in the rows and have the rows 40 inches apart. Put down two runner plants six inches apart in space between parent plants. First year cultivate thoroughly cutting all runners except the two layered as above. Our row is six inches wide. Bears first crop then is thoroughly cultivated balance of season. Bears second crop. Is now 20 inches wide with 20 inches space in center for cultivating with horse. I now take a sharp shovel plow, hitch two horses to it and plow a furrow 8 inches wide through center of row, destroy all parent plants and the two layer plants which bore first year. Keep this 8 inches worked also the 20 inch middle. After picking third crop plow bed for turnip.

### The Home Orchard Movement

A farm home without a fruit orchard is about the saddest thing that a man may witness in traveling through a farming section, says Prof. W. J. Wright, in National Stockman and Farmer. To the casual reader this statement means little or nothing, but to the thinking man, the man who is concerned over his own future happiness or the welfare of posterity, it undoubtedly will come as a great truth.

It used to be that a home orchard of half an acre or more was considered a very necessary part of a farm home. The farm home without apples was a rarity and by casting back in the recesses of our memory we can think of the kind of apples that we used to get in the old farm home.

Whether the average man knows it or not it is nevertheless true that the old-fashioned family orchard is largely growing to be a thing of the past. Thousands of so-called independent American farmers today are absolutely dependent upon the

nearby city markets for the fruit that they use on their tables. They must not only pay the price asked by the city jobbing houses and grocery stores, but they must accept, without a grumble, the inferior and much-handled fruit that they are able to get at such places.

### Carving an Army in a Mountain

A monument to be carved out of the living granite of a mountain, a monument of flawless granite two miles long and a thousand feet high—to be built as an everlasting memorial to the people of the South and the cause of the Confederacy—such is the gigantic task allotted to Gutzon Borglum, one of America's foremost sculptors.

According to the "Popular Science Monthly," this great monument is to be carved from the solid granite composing Stone Mountain, which is located near Atlanta, Ga., and which is called "the largest pebble in the world," since it is one solid stone, two miles long, without a flaw or a fissure in its entire surface.

Upon the face of the mountain hundreds of men will be engaged for eight years in carving companies of giant figures representing the Confederate army and its famous generals on the march. Should Mr. Borglum wish to complete the task alone he would have to live for centuries. The central portion of the group, bearing the likeness of the leaders of the army on horseback, will be approximately thirty-five to fifty feet high. The line of marchers will be nearly 2,000 feet in length.

Cut into the heart of the mountain will be a memorial hall, running the entire length of the colonnade. In this imperishable hall will be kept the valuable records and relics of the Daughters of the Confederacy, as well as records of the Southern states.

A park of eighty acres will be laid out at the foot of the mountain, and from its path a suitable view may be obtained of the principal figures carved in the rock.

The cost of the work, which is now estimated at about \$2,000,000 will be raised by individual contributions from the entire people of the South. It is said that several wealthy people have offered to finance the entire project, but it was deemed best to make this a popular undertaking, so that it may more truly represent the spirit of the American South.

### A Happy and Successful Fruit Grower in Maine

My dear Mr. Green: I have not missed a copy of Green's Fruit Grower for years, I would not be without it. No paper comes before Green's Fruit Grower with me. I would give more to see Charles A. Green and have a chat with him than the President of the United States. I am sixty-two years of age, so it is doubtful if I ever do.

It is one of the pleasures of my life to travel over my orchards during the growing

season. My berries, apples, pears, plums and cherries all came from Rochester, N. Y.

I was a farmer's boy. I did not like to work for other farmers, but it was an ideal life for me to farm it for myself. I could make twice the money in the shop that I could to hire out on a farm. During five years in the shop I saved \$1100, but I had to leave the shop as the indoor work was injuring my health. I wanted to earn a little more so as to buy a farm. I recovered my health after about nine months and bought a farm. Then I started in for a busy life. I got married of course and had nine children, five boys and four girls. Eight children graduated from high school. My four girls taught school and the boys were well situated in life, but all have left the old home, so wife and I are all alone. We are sad and lonesome at times. Perhaps in the years to come one girl may come home to us. I never could leave the farm as some do. It has been my life. My orchards are dear to me as are the fields I have cleared, the drains I have dug, the rocks I have sunk. I have done more of this than any other farmer in town. I have been in perfect health since I left the shop 35 years ago. No man I hire does the work I do today.—Walter S. Buck, Maine.

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Soft Peaches

This photograph was taken near one of the famous peach orchards near Rochester, N. Y. Up to this date no profitable use has been found for the peaches which ripen on the trees and which are too soft to ship to market. These are the juiciest and best flavored of all the peaches. A peach, picked from the tree when it is hard and not quite ripe can never equal in quality the peach that has fully ripened upon the tree, but what shall the peach grower do with soft peaches?

In the above photograph they are discarded as worthless, and yet how these luscious peaches would be sought after if they could be transported safely to the markets. You may ask why should they not be canned, but canning houses will not buy these over-ripe peaches, and the canning of the peaches is largely monopolized by peach growers of California.

Why not express the juice of the peach and make of it a syrup, jelly or a wholesome drink? It takes time to learn the best methods of disposing profitably of such material as these soft peaches, which it is pitiful to see wasted when there are so many who would enjoy eating them.

# Notes from Green's Fruit Farm

By E. H. Burson

**The Currant Crop.** Perhaps owing to the limited crop of strawberries, raspberries and cherries, there was a much better demand for this fruit the past season. Almost anything in the line of red and black sold readily at from one to three cents higher per pound than last year. The demand for black currants was most unusual, the crop selling at from eight to ten cents per pound. There are comparatively few fields of these blacks fruiting in the vicinity of Rochester and it would appear that there is a fair opening for growers to make some money. Pays Prolific, Red Cross, Wilder and Diploma are the leading reds. Pays is a favorite on rich loamy soil. Wilder satisfies many growers until they try the Red Cross and the Diploma. Red Cross may be considered the best grower perhaps on any average farm soil, but Diploma excels in size of fruit. During the past week we picked and sold a prime lot of both Red Cross and Diploma fruit, and at this date Aug. 10th have some very showy fruit still unpicked. Perfection is one red variety which comes in for a lot of praise as a cropper from some growers and is undeniably a good variety but does not satisfy us in growth of bush, and does not compare with Diploma in fruiting on our grounds.

Gooseberries sold better this season than last both locally and in distant markets.

**Peaches** sold at Rochester's public market the other day from the growers wagon at \$1.00 per basket. The variety I believe was the Greensboro. This variety is very hardy in bud and aside from one other is the only variety fruiting here this season. The warm weather last January and the cold snap in March was too much for peach buds.

**Apples are Apples.** What's the matter with the early apples this season? Asked a buyer on the market the other day. "If you have any good or poor, be sure and bring them in next time, everybody wants apples and there are few offered."

**Producing Large Currants.** Pruning

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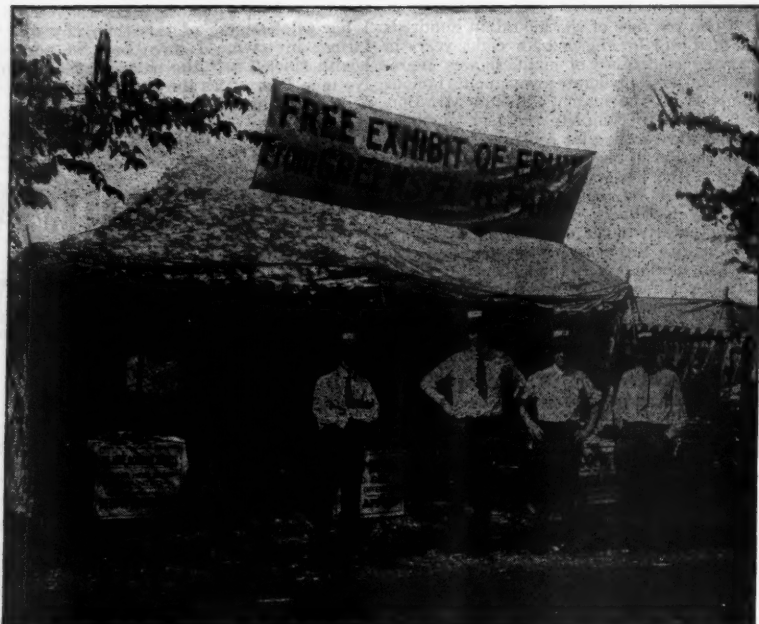
has considerable to do with it. Even the largest fruited varieties will soon run down to smaller fruit if the bushes are let go unpurged. In March of each year it is our custom to cut back the bushes severely, removing two-thirds or more of the previous season's growth. Newly set plants should be cut back too.

**In the Shrubbery.** Just now the Spirea Billardi and the Butterfly Bush are at their best. Hydrangea Aborensis have changed from their snowey loveliness to a dull green and Hydrangea P. G. is just beginning to make its usual show of attractive blossoms. Although it has been an exceptionally dry season the dwarf Baby Ramblers persist in blooming and the seed

ment of mildew as a result of frequent spraying it is advisable to make the application in the early morning, so that the spray will dry off the plant promptly.

The spraying device to use depends on the amount of spraying necessary. A cheap atomizer, such as can be bought in any seed store, is quite satisfactory for small plants and gardens. Good knapsack and barrel pumps are available for commercial growers.

The drinking glass has been abolished. The tin cup has been branded dangerous. The old gourd has disappeared. The booze jug is tabooed. The building fountain that had the endorsement of the high brows has



As Our Tent Will Look at the New York State Fair, Sept. 11th-16th, 1916

podded stalks of the Yucca proves that there must have been an amazing array of bloom.

The perennial phlox bed in its variety of color is now a center of attraction and the gladiolus—(blooming somewhat earlier than usual this year) causes visitors to wish that they had planted a bed in the spring.

**Everlasting Flowers.** I don't know that anyone has ever called the tulip an everlasting flower but thirty-two years ago there was a bunch of these early spring flowers blossoming on the lawn of the old homestead here and last spring and every spring this same clump of blooms has been in evidence, the bulbs having never been disturbed.

## Rose Bugs and Aphis

The simplest, most commonly used, and often quite effective remedy for Rose Bugs is to turn a fine but forceful stream of water on them by means of the garden hose. Applied often enough this gives satisfactory results.

Solutions of fish-oil or cheaper grades of soap are often useful as a prompt remedy. The soap is used at the rate of 1 pound to 4 gallons of water. To make the solution, shave the soap into the water and dissolve by heating, adding enough water afterwards to make up for evaporation.

The best remedy for the rose aphis is 40 per cent nicotine sulphate (a liquid which can be purchased in most seed stores) diluted at the rate of 1 part to 1,000 to 2,000 parts of water, with fish-oil soap or laundry soap added at the rate of 1 pound to 50 gallons of spray mixture. The simplest way to prepare the spray in small quantities and secure satisfactory proportions of the ingredients is to put 1 teaspoonful of the nicotine sulphate in from 1 to 2 gallons of water and then add one-half ounce of laundry soap. One spraying is usually 100 per cent effective, but if the first application has not been thoroughly made a second one may be necessary.

In order to prevent the possible develop-

ment of mildew as a result of frequent spraying it is advisable to make the application in the early morning, so that the spray will dry off the plant promptly.

## LONDON LAND VALUES Held to Be the Highest in the World —Some Recent Examples

Not long ago a tiny piece of ground at Charing Cross, adjoining the Mall archway, and comprising only 461 1-2 square feet, with a frontage of 69 feet, was sold by the London county council to an insurance company for £11,737, which works out at £1,100,000 an acre.

It is in the city, the square mile of which is valued at £250,000,000, however, where land can easily claim the distinction of being the dearest in the world. For property near the center of the city £3,250,000 an acre is not an unusual price. Portions of Cannon street, Queen Victoria street, Upper Thames street and St. Mary-at-Hill, are said to be worth about 5 shillings a square inch, while in Lombard street and King William street land has been sold for £40, £50, £60 and £70 per square foot freehold.

The three acres on which the Bank of England stands would realize at a low estimate, £7,000,000, for the land adjoining has sold at £70 and £80 a square foot.

## Fecundity of Certain Insect Forms Is Astounding

The progeny of one little insect, the "hopaphis," sees thirteen generations born to it in a single year, and would, if unchecked to the end of the twelfth generation, multiply to the inconceivable number of ten sextillions of individuals. If this brood were marshaled in line, ten to the inch, it would extend to a point so sunk in the profundity of space that light from the head of the procession, traveling at the rate of one hundred and eighty-four thousand miles a second would take two thousand,

five hundred years to reach the earth.

In eight years the progeny of one pair of gypsy moths could destroy all the foliage in the United States, if unchecked.—"Popular Science Monthly."

## The Fruit Cure

The great remedy for diarrhoea, chronic or acute, is nature's own remedy, acidulous fruits. Strawberries, raspberries, huckleberries, quinces, peaches, apples, and grapes are all good, but not in an equal degree, nor are all of them equally suitable for all cases. Peaches must be used with caution. Pears are too relaxing in many cases, especially when there is great weakness; but when they can be taken, they have special value of their own, not only on account of their great cleansing power on the system, but also on account of their decided action on the kidneys. Apples are excellent, and can be used by almost every one who has good teeth. They must be thoroughly masticated. The peel should be rejected if tough, but will do no harm if tender and chewed to fineness. Grapes are best of all. Grapes are also an effective remedy for malaria and for scrofulous diseases.

Whatever kind of fruit is used, it must be used freely on an empty stomach, at regular meals only; never between meals. Especially ought the fruit to be eaten just before breakfast, when it has its best effect. The whole breakfast may often be made of some one kind of fruit with great benefit, with the addition, perhaps, of dry bread or graham water-crackers. In some cases an exclusive diet of grapes will, in a short time, effect remarkable cures. The first effect of the free use of fruit on the patient who has not been accustomed to it will be cathartic. Do not be alarmed at this, but use the remedy the more freely at the beginning of every meal, and the tendency to purge will soon correct itself. Should there be symptoms of colic on account of too much acid, sip a gill or two of scalding hot water. In most cases two or three gills of the hot water, sipped half an hour before breakfast, will greatly facilitate a cure. This hot water before breakfast is also one of the best things for constipation and dyspepsia.

## YOU WILL BE WELCOME

at our tent at the New York State Fair, Syracuse, N. Y., September 11th to 16th. We will be located on Onondaga Avenue near the Secretary's office, and will have with us over 100 varieties of fruit from Green's Fruit Farms. Look for the sign shown in the picture on this page. Mr. E. H. Burson, Superintendent of Green's Fruit Farms, and several men from our Rochester office will be present and will all be glad to answer questions about different varieties, planting, etc., and to help you in any way they can. Chairs will be provided for resting and we hope as many of our readers as possible will take advantage of this opportunity to get acquainted. Remember the location, Onondaga Avenue, near the Secretary's office.

I have been a subscriber of the Fruit Grower, I think, ever since it has been published. We could not get along without it. W. H. Northrup, Ind.

My wife says she does not want to miss a single number, and neither do I. We would rather miss anyone of the other seven papers, than one copy of the "Fruit Grower." It is the best paper on the table.—Wm. B. Holmes, N. J.

## Apple-Picking Time

Long in apple-pickin' time there is somethin' 'bout the weather  
That'll set your spirits dancin' till they're lighter than a feather;  
You can hear it in the music o' the neighborin' rooster's call,  
You can see it in the squirrel carryin' nuts along the wall;  
An' the rustle,  
An' the bustle,  
An' the hurryin' in o' crops,  
An' the weedin'  
An' the seedin',  
An' the weedin' o' the lots;  
There's a busy feelin' in the air that sets your soul a-rime  
In the hearty, healthy workin' days o' apple-pickin' time.  
—Youth's Companion.

## Transplanting Large Trees

Written for Green's Fruit Grower by F. H. SWEET

A new system of transplanting large trees is now being successfully used.

The idea is that of a steel basket, which encases the earth and roots of the tree to be transplanted. The size of the basket depends on the size of the tree. In effect, it is to the tree what a flower pot is to a plant.

By this method trees may be transplanted when the tree is full of life, in midsummer, better than by the old method of transplanting, when in their dormant condition. Not only can a summer transplanted tree be made to live, but by applying fresh, rich earth about the roots, it can be made to grow more rapidly than before removal. This new method saves the loss of many months' time ordinarily consumed in overcoming the shock of ruder methods of transplanting trees, and it is cheaper than other methods.

The first work to be done in transplanting a tree is to thoroughly wet the ground about the roots of the tree to soften it. This puts it in the best possible condition for transplanting. The tree is then encased in a steel crate about six feet in diameter to which are hinged fourteen curved shovels of five-sixteenths-inch steel. Two men can drive all the shovels the necessary three or four feet (in clay soil) in half an hour. The edges of these shovels meet under the roots. Then with bars across the hinges, the operator secures them to the crating and the tree is encased in its steel basket.

Then begins the work of lifting the tree from its bed. A combination of wagon and machine, called the "transporter," is adjusted about the tree. Screw-power is applied and the whole thing is lifted out by the cross-bars, the men having complete control of the work. The tree can be raised or lowered at will. By the screw leverage method two men can easily raise a weight that by the old way would require perhaps twenty workmen.

Lifting the tree and securing it in the transporter is soon accomplished. A cushion at the back of the wagon is then arranged so that the tree can be adjusted at such an angle that no possible strain will be put on the trunk and bark. Leaning the tree this way also keeps the branches free from contact with telephone and telegraph wires and other obstructions.

When the place selected for the tree to stand is reached, it is slowly and gently lowered into the hole prepared for it. After the transporter has been removed, the men fill in around the roots with fresh, rich earth and pack it down about the basket. Then the shovels are withdrawn, leaving the tree firmly embedded without the loss of any of its original surrounding earth that contained its fibrous or hair roots.

This method of transplanting trees provides for the proper setting out of the tree as well as its safe transportation. The lifting and conveying device is operated with reference to the points of the compass, so that the tree may be replanted in the same position it originally occupied.

The vehicle for conveying the tree is built with heavy framework that can be raised and lowered by the screws upon the trucks. The power is so adjusted that two men can handle without difficulty a tree ranging from thirty to forty feet in height. Maples, elms and other shade species, having trunks ranging from five to seven inches in diameter, have been transplanted during mid-summer, and are in as good condition as before they were moved. The old idea was that it was better to transplant in winter when the tree was dormant. With this device it is quite practicable to move a tree at any time of the year.

The advantages of this method are obvious. Small trees can also be taken up and transferred to shipping baskets, retaining all the earth and roots. It is also of great value to the landscape architect; it makes it possible for him to furnish a lawn quickly with full-grown shade, ornamental and blooming trees, shrubs, vines and plants. It does away with the very harmful and expensive method of freezing the earth and roots to hold them together in transplanting. It keeps the earth and roots intact and plants everything, even the finest hair roots, undisturbed, making it possible to move trees any time of the year.

Heretofore the transplanting of grown

trees has been slow and difficult, and the result uncertain, sometimes the tree thus transplanted flourished, but more often died. These failures in large tree transplanting resulted mostly from injuries received by the bark or the trunk of the tree; either by severe bending of the trunk or the breaking of the bark where the tree comes in contact with the fulcrum, over which the tree is forced from the ground. The bark is the most tender, as well as the most vital part of the tree, a fact well known to the rabbit as well as to the farmer.

Just as well a rope might be tied around the neck of a man to pull him from a pit as to use any device that will injure the fiber or bark of the trunk. The florist, the most successful transplanter, prepares his plant by confining the roots and earth in a pot that they may be moved undisturbed any time in the year, and therefore never loses a plant.

No tree, either large or small, should be handled in any other way than from its base.—F. H. Sweet, Waynes, Va.

### Fruit and Seeds

'Tis the radiant rare September  
With the clusters ripe on the vine,  
With scents that mingle in spicy tingle  
On the hillslope's glimmering line,  
And summer's a step behind us,  
And autumn's a thought before,  
And each fleet sweet day that we meet by  
the way  
Is an angel at the door. —Unknown.

### Fruits a City Man Should Plant

Many city dwellers have a little ground that could be planted to fruits and vegetables, to good advantage. Such plantings would not only give much wholesome food at a great saving, but would give much pleasure to all the family. Aside from the money value of fruits grown, there would be even a greater value in the health and pleasure of producing these luscious fruits.

What and how much a city man should plant will naturally depend on how much ground there is to devote to the purpose. I take it, however, that there is but a lot or two or less. That being the case in most instances, it will follow that only fruits that do not take up a great deal of room and that will give fruit within a reasonable time after planting should be planted. Apples and pears require room and longer time until they will give profitable crops, so that it is not advisable to plant them where room is greatly limited.

Peaches come into bearing soon and cover a long season. Not more than two trees of each variety should be planted.

A tree of Montmorency and Richmond Cherry will be desirable. If there is room for a plum tree, Americus will be very satisfactory.

Grapes are one of the most satisfactory fruits that can be planted on a city lot, will occupy little room and give an abundance of fruit. Can be trained on walls, porches and over arbors, where they will give fruit and shade. For varieties, Worden, Concord and Niagara are a good list. If there is room, plant a dozen Raspberry.

Be sure to have ground for at least a hundred Sweetheart strawberry plants. They will give more fruit than anything else that can be planted, and will do it throughout the growing season. To do their best, they need rich soil, good cultivation and plenty water. Given these, there is no other fruit that will be as satisfactory for the city dweller.

(Note.—This paper was read by Mr. Riehl at the recent meeting of the Illinois Horticultural Society. Article changed somewhat.)

### Pudding-Head Philosopher

Patriotism is the egg that hatches war. A good day's work is the best prayer for rest.

A man may be a Pole and not succeed as a poultryman.  
Two souls with but a single thought—two office seekers.

Every dog has his day and too many of them have their nights also.  
Nature is a good doctor, but she makes her patients pay to the last cent.

There is a good deal of speculation even

in government crop reports.

In building up a great army the common herd is not commonly heard.

Owning in fee simple 160 acres of farm land puts no halo about a man's head.

One of these days the old earth will be loped with the fruitfulness of America.

If ever an animal on earth deserved wings and a golden harp it is the average farmer's wife.

In real life, it is not always possible to strike oil on the old ranch and pay off the mortgage.

Every professional politician is selfish to the core. If he were not he would not be a professional politician.

When we are not longing for some monotony to relieve excitement we want some excitement to relieve monotony.

—Denver Field and Farm.



At the Fair—

## KODAK

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Yes and pictures of the friends you meet at the fair, and the incidents in coming and going. There's a worth while album full of Kodak pictures on every such trip.

Ask your dealer to show you the new 2C Kodaks and 2C Brownies. The pictures are 2½ x 4½ and these cameras are right up to the minute. They have all the worth while new features and make pictures of the size and shape you want at a low cost. They sell at \$9.00 to \$19.00.

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Goulds Fig. 1875 Power Sprayer Outfit

## Woman's Dept.

### On Mother's Baking Day

"When mother's baking day comes round,  
I'll tell you what I do,  
I wait until they're nice and brown,  
And then I know she's through,  
And that she'll call me pretty soon,  
And say, "Come, little man,  
I'll give you my big mixing spoon,  
And let you scrape the pan."

### GOOD RECEIPTS

#### Ginger Pears

4 pounds pears; 2 pounds sugar; 1 orange; ½ pound Canton ginger; 2 lemons.  
Wipe, quarter and remove stems and cores from the pears, and cut them in slices. Cut the ginger in small pieces, add the sugar and lemon and orange juice. Cut the orange skin into long, thin strips; add this to the pears, and mix sugar and pears together. Let stand overnight. In the morning, cook slowly for three and a half hours. Fill into small glass jars, and cover with melted paraffin.

Pears that are not perfect for canning whole or in halves may be used to make excellent conserve.

#### Pineapple Whip

½ box gelatin; 1 can pineapple (grated); ½ cup sugar; 1 pint cream.  
Soak gelatin in as little cold water as possible. Mix pineapple and sugar together and bring to a boil. Add gelatin, and let stand (about three hours) until it begins to get stiff. Then beat in the whipped cream. Serve, very cold, in tall glasses with a maraschino cherry on top of each. This recipe will serve six persons.

#### Candied Grapefruit Peel

Cut grapefruit peel in long strips, put on to cook in cold water, let boil up and drain. Repeat four times. Then add as much water and sugar as peel, and simmer until translucent. Then drain, roll in granulated sugar, and let dry.

#### Orange Tea

Slice two well-flavored thin-skinned oranges into the thinnest possible slices, discarding all seeds. Cover with one quart of hot tea, sweeten to taste, and serve cold or hot.

#### Whole Wheat Gems with Dates

Remove the stones from ½ pound of dates and cut fine. Beat 1 egg light, add to it 1 teaspoonful of sugar, ¼ teaspoonful of salt and 1 cup of sweet milk. Stir in 1 cup each of white and whole wheat flour, sifted with 2 heaping teaspoonfuls of baking-powder. Beat well, then stir in 2 tablespoonfuls of melted butter, lastly the dates. Bake in gem pans for twenty minutes. Sweet cream or condensed milk may be substituted for the milk—omitting the butter.

#### Boiled Cake

To two cups of hot water add one cup each of seeded raisins and sugar, one half cup of lard and a scant teaspoonful of cinnamon, nutmeg and ginger, or any preferred spices; place in a saucepan over the fire and let boil five minutes, allow to cool, then stir in two cups of flour and a teaspoonful of soda. Bake slowly. I use for this cake a tin ten or eleven inches square, and frost it with confectioners' sugar stirred to a smooth paste with fruit-juice, or cream flavored with vanilla. Sometimes for a change I use coffee instead of water, or brown sugar in place of white.

#### Making Cake

Written for Green's Fruit Grower by  
L. Eugene Eldridge, Mass.

"Let all things be done decently and in order," is the first law in cake making as in many other branches of Domestic Science. And really the first thing to put in order is yourself. Be sure that your hair is smoothly brushed and that no stray hairs are lodged on your shoulders

or elsewhere. Be very careful in this respect. It is a good plan to wear a net or a tidy morning cap. Make hands and fingernails very tidy, roll sleeves above the elbows and put on a large clean apron. Provide the kitchen table with everything that is needed, and remove everything not needed until after the cake is made and baked.

Place the eggs in cold water for a few minutes before using as they will make a finer froth, and be sure they are fresh, as no amount of beating will make a stiff froth if old.

Good butter should always be used as heat develops any latent bad qualities.

Grease pans with lard which is much better than butter, and line the bottom with paper. In making cake, if you wish it nice—as who does not—use best materials. Good flour, sweet milk and butter, fresh eggs and so on, always remembering results will be better if care is used both as to materials and the putting together. There is an old proverb "If you do not take pains, pains will take you." And this is quite true in cake-making. So we will suppose you have everything fresh and nice, yourself as well.

Sift all flour twice, and even four times is better. Sift sugar if not pulverized. Fine sugar makes finer cake. Beat yolks of eggs to a froth, placing whites in a cool room till needed and then beat vigorously until they will remain in the dish when turned upside down. Beat butter to a cream, add sugar gradually, then half the flour with baking powder or cream of tartar and soda, then the other half next the milk and lastly the flavoring.

"Points" is a great word in these days. It is a point to remember, that there is a

some extent. Settling away from the pan is one indication that the cake is done. Remove from oven and after cooling place in a tin box or earthen jar.

Almost everybody likes cake when well made. And there are many kinds including ginger breads. The writer well remembers one of the delights of her childhood was "sugar gingerbread." Recently several men were conversing—various good eatables were mentioned. One man said, he would rather have a one-egg cake such as his mother used to make than all the kinds and sorts of salads manufactured. (Nevertheless salads are good in their way.)

This recipe everybody likes and it is good for birthday cakes.

#### Cream Sponge Cake

Two eggs, teacup (not coffee cup) of sweet cream, 1 cup sugar, 1 and ½ cups sifted flour. After beating thoroughly add two teaspoons baking powder and bake immediately.

#### Excellent Sponge Cake

Four eggs, beat whites with one cup sugar, add beaten yolks and one teaspoon vinegar. One cup flour and pinch of salt sifted four times and fold in. After placing in oven do not open door for ten minutes. My mother's wedding cake made sixty-six years ago followed this rule, quite nearly.

#### Pests on House-plants and their Eradication

Written for Green's Fruit Grower:—The most common insect to be found are the little black flies and small white worms that infest the soil and roots of plants. A surface dressing of lime and sulphur which may be allowed to remain on the soil is good to get rid of them. Wood soot and tobacco dust in equal proportions are equally effective.

Many who get plants from florists are troubled with the mealy bug, a little pest generally found at the forks of the stems and axil of leaves, that resembles little clumps of cotton or a substance that looks like flour.



Here is a school for the young people who are studying agriculture. Some of the boys are husking corn and tying the ears together for seed. Some of these boys have received prizes for their work at Great Barrington, Mass. Anything which can be done which will interest young folks in farm crops and in the various fruits will add to the agricultural revenues of the nation and will make farm life more enjoyable and more profitable. I heartily approve of this forward step in teaching young people interesting and practical things about farm crops.

knack in beating cake. Never mix cake in a tin dish. Always use earthen, bringing the batter up from the bottom with every stroke of the spoon. In this way the air is driven into the cells instead of out, but the cells will be finer if beaten more slowly toward the last, remembering that the motion should always be upward. Unskillful mixing, too rapid or unequal baking, or a sudden decrease in heat before it is quite done, will cause streaks in a cake, always to be guarded against.

If butter and sugar are creamed together the mixture is well begun and this is important.

Some thought should be given the oven as proper baking has much to do with the success of the result. It is oftener too hot than too cool, altho' an oven too cold at first will ruin any cake. The fire should burn until a good body of heat is had, then dampers turned fully ten minutes before cake is placed in oven. In this way a steady heat to start with is secured. To be sure some kinds of cake require more heat, or a "quicker oven" as we say, than others. No hard and fast rules can be given. One's experience must guide to

To get rid of these, use a fine brush, a tooth brush will answer the purpose, and brush each infected stalk in a warm tea made by steeping a handful of guassia chips with enough hard soap, tar soap is best, to make a weak suds. Apply as hot as the plants will bear, even to wetting the soil thoroughly. I find the guassia chip tea is good for all insects and invigorates the plants, making them thrive nicely.

The worst insects of all are the scale insects, deadly enemies to any plant of a shrubby growth and are often unknown as so many people ask what those "flat, brown, scaly things" are. No remedy has been found to permanently destroy them. Only by cutting off and burning all the infected fronds can a plant be saved. They are prone to especially attack ferns and palms. Be sure to burn them when cut off as they work deadly harm in a fruit orchard if once they get a foothold.

My rose bushes have always thrived by giving them a bath in soap suds frequently and keeping tobacco dust on the soil. This treatment will insure healthy plants of nearly all kinds, if used occasionally.—Honor Bright.

### HOUSEHOLD NOTES

Onions absorb all poisons and noxious smells quicker than anything else.

Sponges which need cleaning should be steeped in vinegar and water for a day.

A heavy broom always should be selected in preference to a light one, as the weight adds in the process of sweeping.

A pinch of salt added to the flour used for thickening gravy before mixing it with water helps to keep it from being lumpy.

To make a faded dress white, boil it in two gallons of water in which a halfcupful of cream of tartar is dissolved.

Don't sprinkle flour in your juicy pies. Mix it with sugar, then there will be no lumps.

To rid the pantry of ants, mix cayenne pepper and borax and dust it around the pantry shelves.

When jam assumes a "sugary" appearance, stand it in the oven until the sugar has melted, and when cool it will be ready for use.

Make unbleached cotton slips for mattresses and wash twice a year. This saves the heavy beating of mattresses and protects from spots.

A palatable way to serve cold, boiled potatoes is to put them through the sieve. Season them well with butter and salt; form into cones and brown in the oven.

To remove grease on Wall Paper place a piece of blotting paper over the spot and use a warm iron to press it with. The grease should be absorbed by the blotting paper. Change it until all grease is gone.

Always put your vegetables on in hot water to boil. If put to cook in cold water the flavor will be lost and in most cases the vegetables will be soggy. Too rapid boiling toughens vegetables, while too little heat renders them flat and insipid.

Sheets, tablecloths, spreads and the like are difficult to fold when taking from the line, but if you will unpin one end, then pull over from line, catching in center and take fastened end from line, you will discover it a very simple method.

If you want your white goods to be real white, not grayish or yellowish white, you must use Borax. If a little Borax is added to the starch the clothes will be glossy and the iron will not stick. Borax makes washing a simple and easy undertaking without any harmful results. No special directions are necessary, as all you have to do is to add as much of it to the water as you desire. You cannot add too much, and the more you use the better the results will be. When Borax is used less soap is required, and time is also saved.

If the color has been taken from silks by acids it may be restored by applying to the spots a little hartshorn or sal volatile.

Add a few drops of olive oil to homemade mustard and it will not dry out so quickly, nor will it crust upon the side of the jar.

Velvet garments should always be made with the nap inclining upwards.

Orange Milk Sherbert: Juice of six oranges and six lemons, five cups of sugar, and three quarts of milk. Scald the milk, dissolve the sugar, and chill. When all the ingredients are ice-cold, combine and freeze.

#### Kerosene will Remove Stains from Bath Tub

Soda or scouring powders will injure finish, oxalic acid will remove brown stains. The most efficient method of removing that oily deposit which forms on the sides of the porcelain bath tub and bowl is to use kerosene. Take some soft paper, moisten with kerosene and rub over the soiled part. This will cut the grease easily and the extra kerosene can be wiped up with more paper, which, with the first, should be



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# Poultry Dept.

## The Lay of the Hen

How wonderful would be the hen,  
How truthfully could she then boast,  
If she could go and lay an egg  
Well poached on a piece of toast.  
—Yonkers Statesman.

Most wonderful, indeed, you bet,  
Would be the hen if she were able  
To lay a nice ham omelet  
Before us on the breakfast table.  
—Springfield Union.

Most marvelous the hen would be,  
The wonder of her kind in truth,  
Could she but give her progeny  
The blessing of eternal youth.  
—Peoria Journal.

A suffragette the hen would be,  
Fit for all things in life to tackle,  
If, with a little practice, she  
Would learn to crow instead of cackle.  
—Youngstown Telegram.

## Old Proverbs About Poultry

A laying hen is better than a standing mill.  
A large rooster does not suffer a small one to crow.  
A setting hen never grows fat.  
Black hens lay white eggs.  
Every rooster scratches toward himself.  
Every hen knows how not to tread on her own chickens.  
Good hens lay few eggs.  
He who feeds the hens should have the eggs.  
Hens like to lay where they see an egg.

## Hens Need Fresh Air

A poultry house usually needs more ventilation than is given. Fresh air is far more important than warmth. Fresh air means health but must never be supplied by a draft. The poultry house should furnish protection from storms and cold winds, and always provide a clean, dry feeding floor and a clean, dry roosting place. If a house is damp in winter it is usually because there is not enough ventilation, and more air must be admitted in some form to carry out the dampness and bad air.

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## About Raising Broiler Chickens

(Continued from August Issue)

During the first month or two of the season, it frequently costs thirty-five cents to produce a broiler; but this is when the broilers are bringing the highest prices of the season, and, therefore, the profit on a bird costing thirty-five cents to produce during the early part of the season, is as large, if not larger, than that on one produced at a cost of only twenty cents later.

The cost of producing a broiler as shown from accounts that I have kept for the past few years, demonstrates first that I am able to market, on an average, one broiler for every two eggs set, including infertile ones, as follows: 2 eggs, 5 cents; brooder and labor, 8 cents; food for one chick, 10 cents; picking, 5 cents—total cost for a two-pound broiler, 28 cents.

In considering the best breed for broilers as a rule the Mediterranean family, including Leghorns and Minorcas, are less desirable; for in most cases they have been bred simply for great egg-production, little or no attention being given to market qualities, although a strain of large white Leghorns has recently been developed.

In the Asiatic class we have two birds, each of which is considered a good market breed by many poultrymen. They are the Brahmas—light and dark—and the Langshans—white and black. We have, at one time or another, kept birds belonging to each of these varieties, and we do not consider either breed a first-class market breed. However, of the two varieties, we prefer the Brahmas; and they are especially adapted to cold climates on account of their small pea combs and heavy feathering of both body and shanks. White Langshans are not at all popular, and I do not know of any large poultry plant that uses them. While they are useful and beautiful fowls, the field for white fowls possessing the general characteristics of the Langshans has been occupied by other varieties, notably White Plymouth Rocks and White Wyandottes. Both varieties of the Langshans have white skins, and this is also against them in the United States markets, where yellow-skinned birds are greatly preferred, and the best trade will accept none other. Black Langshans also have another disadvantage in the form of black feathers. Birds with black or darkly colored feathers cannot be made to present a very attractive appearance when dressed, no matter how carefully they are gone over, because of the fact that the pin-feathers, if any remain (and it is next to impossible to get them all off), show up quite plainly, forming a glaring contrast to the skin, and thereby detracting greatly from the appearance of the carcass.

The Plymouth and Wyandotte families are deservedly the most popular among broiler growers. Any of the varieties in these two families are quite desirable on account of their yellow skins and legs and ideal market shape; but there is one breed in each of these two families which, while retaining all the other points of merit possessed by the other breeds in its family, is superior to the remainder in one important particular. These two breeds are the Buff Plymouth Rocks and the Buff Wyandottes, and the point of superiority is an entire absence of colored pin-feathers at all stages of growth, from the shell to the shop. The color of both skin and feathers being yellow, a minute examination is necessary in order to discover any pin-feathers on the dressed carcass provided, of course, that it has received a reasonable amount of care and attention in the dressing.

The first year or two we were engaged in raising broilers I was careful to see that all eggs incubated were fresh-laid, and discarded all ill-shaped and all very large or very small eggs. Now we go further back than that, even beyond the hen that lays the egg, and find the health and strength of her ancestry. In other words, we examine her family tree. If, upon due investigation, we find the hen which is to lay our egg is the offspring of several generations of strong, healthy, vigorous birds, we

may safely depend upon her giving us the proper material upon which to build our broiler structure. The reason why it is absolutely impossible to build up a successful broiler business on eggs from stock other than those in perfect health and of strong vitality, are obvious. In order to secure your quick grown, juicy carcass, there must be a forced growth right along from the very hatching, and the chick must necessarily possess the stamina and vitality which comes only through inheritance, and which enables him to stand the hardest forcing for growth and still keeps him busy and happy. The chick from poorly-fed, ill-developed parent stock of hit or miss breeding, cannot, and will not, fill the bill.

In view of the fact that the hatching and brooding of broilers is done at a season of year when it is impossible to obtain many broody hens, the grower must depend on incubators and brooders. Those used should be the best obtainable among modern machines. A good incubator is necessary, because a good start means much in everything, and, since the hatching of the chicks is the very foundation of the broiler business, faulty incubation would ruin all possibility of success. Scarcely less important is the brooding, for it isn't so much the number of chicks one hatches as the number he raises to a marketable size that helps his bank account.

Brooding may be accomplished by means of individual outdoor or indoor brooders, sectional brooders, or with a modern pipe brooder house. Different conditions make different methods necessary. The prospective broiler grower should carefully investigate the merits and demerits of the different methods, and then adopt the system seemingly best suited to his individual circumstances. Many home growers are doing a good business with individual brooders, and these answer the purpose excellently where the business is not engaged in so extensively; indeed, I prefer this system of brooding to any other where it is practicable. On large plants, however, the pipe brooder house best suits the purpose, and is also more economical than the individual system.

While the condition of the breeding stock and the manner of incubating and brooding are of great importance, the subject of "what to feed and how to feed" is also a vital one. In feeding broilers the main object is to secure the most rapid growth possible, sacrificing everything to the single end of bringing the birds to a marketable size in the shortest time possible. We do not force our chicks at all during the first week or ten days of their lives, but during this time they are fed and cared for much the same as chicks intended for breeders or any other purpose. After they have passed this age, however, the more we can force their growth the better.

Many of the incubator and brooder companies, as well as the poultry supply houses, are selling prepared food stuffs which have been compounded with the single idea in view of forcing the growth of the birds to which it is fed. Excellent results have been secured with this food, but we found it to be more expensive than the food which we usually feed our broilers, and which, I think, gives equally satisfactory results. This ration is a mash composed of two parts each of cracked corn and middlings, and one part each of ground oats and bran. A sufficient quantity of boiled milk—sweet, sour or buttermilk—is mixed with the feed to bring it to the proper consistency. The birds are fed all of this mash they will eat up clean, four times a day. Grit and fresh water are always accessible to the birds, with some sort of green food daily. In the winter and early spring, about the only available supply of green food is cut clover or alfalfa meal, and when this is used it is boiled and added to the mash. The birds are fed green cut bone once each week—about an ounce to each bird—whenever it can be secured. Ground beef scraps serve practically the same end, however, and are more easily had. Birds are always fasted before being killed, in order that the digestive tract may not be full. No food is given for at least twelve hours previous to killing; and, indeed, we have found that a longer fast—eighteen to twenty-four hours—is frequently desirable. Full crops injure the appearance and the contents are liable to sour. Water is kept before the birds constantly until just previous to the time when they are killed; stock dresses out brighter when well watered, and this aids in securing an attractive appearance. Broilers never

have the experience of being headed and drawn, but are always shipped with heads on and entrails in.

The method of killing birds used by broiler growers is, bleeding in the mouth or opening the veins of the neck with a sharp knife. By this method the cut is hidden and the carcass thus made more sightly.

Birds are always dry picked, as they present a more attractive appearance when picked this way than when they are scalded. Eastern markets will use nothing but dry picked birds. At first our plant was an exclusive broiler plant, but we had to keep a number of hens to lay the eggs from which our broilers came, so we increased the departments, in the meantime producing not only ordinary broilers but also squab broilers, roasters and capons. A combination plant like this is an all-the-year-round one. The eggs are marketed as "strictly fresh during the winter, squab broilers come in the approach of spring, the broilers follow them. Our roaster and capon season is in the fall. Such a plant knows no season of inactivity, and as a consequence expenses are reduced and profits correspondingly increased.

Aside from a reasonable amount of capital about all that is necessary for success is experience and its intelligent application.

## NO LEG BANDS; HEN MUST DIE

Sentence Pronounced by Professor J. E. Rice of Cornell

Professor Rice advises poultrymen to buy two different colored leg bands and to place one color of leg band on one shank of the pullet which lays before it is 6 months old. He finds that there is the most money in the pullets that lay before they are 6 months old. He further advises the placing of a different colored leg band the following year on the hens which are now a year old and which continue to lay after the first of September. He states that the hens which molt early in July or August are invariably poor producers. By this system of banding, Professor Rice has in his flocks at Cornell one set of hens having two leg bands, one set with one leg band, which lay before they are 6 months old, and another set which failed to lay at that time but continued to lay after the first of September. A fourth set, which he has condemned, have no leg bands at all, and he advises the fattening of these and the selling of them as soon as possible.

## The Popularity of Capons

In order to appreciate the capon, one has first to eat them. Plump, thick of flesh, with all the tender juicy and richness of flesh of the young broiler, the capon is a king among delicacies. To offer them for sale is to create a demand at a very marked advance over the ordinary market price for fowls, live or dressed. Now that poultry has reached such a high price in the city markets, the importance and profit of growing them should take a place equal to that of the production of pork or of beef and if rightly come about, it is much more profitable.

The operation of caponizing is one easily learned and practically safe. One has only to purchase a set of caponizing tools and follow carefully directions. After the operation the young bird seems to suffer little in any way and he at once commences to gain flesh rapidly, growing bigger, fattens more quickly and is altogether more profitable than he would otherwise have been.

## Do Your Hens Lay?

If not, Use Sour Milk, Beef Scrap, or Green Cut Bone and Gather More Eggs. "Milk or meat in the ration may make all the difference between profit and loss," declares H. L. Kempster, of the Missouri College of Agriculture. "We know from our tests at the Experiment Station and from the experience of poultrymen everywhere. We got only 945 eggs from a pen of hens that ate no animal food, while another pen of hens, no better in any way, but fed sour milk, laid 1783. Those fed beef scrap laid 1802 eggs. While this is a higher record than either of the others, the sour milk is so much cheaper and easier to get on most farms that we recommend it most highly. The big thing to remember is that the hens fed no animal food brought little more than half as much egg money. Theory and experience both say 'Feed the laying hen sour milk as part of her ration.' A good sour milk ration: Corn, 4 parts,

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Wheat, 2 parts, Bran middlings, 1 part, Corn meal, 1 part, Sour milk separately. Give 100 hens 2½ gallons of milk and from 19 to 25 pounds of other food a day.

### Crows and Cackles Reveal Hens in Parcel Post—And Egg, Too

Two hens and a game cock were found in the parcel post service at the General New York Postoffice yesterday, the coop being on its way from a Parkers Landing, Pa., breeder to a Bridgeport, Conn., fancier, in violation of postal rules.

The transportation of the contraband was revealed through the crowing of the rooster which served also to call attention to the fact that one of the hens had laid an egg.

The shipper was notified by telegraph that the shipment had been withdrawn, whereupon he forwarded an order to ship it the rest of the way by express. The postal officials supplied the poultry with fresh food and water and kept the egg for payment.

Kindly answer through your columns the following question:

What causes a hen to lay occasionally an egg of miniature size minus the yolk? I had a hen lay six or seven successively recently, the Pennsylvania Dutch call them "Uglicks Oi." The old superstition is that they bring bad luck unless you throw them over the house-top that they may alight and break on the other side. I am not superstitious but merely mention this incidentally.—John P. Vogel, Pa.

Reply: Hens often lay small eggs as described in your letter. There is no particular reason for it that we have ever heard of and think it is just one of nature's pranks. These small eggs generally come just at the start of egg production or at the end of a clutch when the hen is ready to take a rest.

### POULTRY NOTES

Dry mash is better for laying hens.

It is the abuse and not the use of corn that condemns it as a poultry food.

The laying of unusually large eggs denotes that the hens are in an over-fat condition.

Keep an egg record and do not fail to make entries daily. The successful poultryman must be businesslike in every respect.

Bones that have marrow in them, when ground, make an exceedingly relishable food for fowls.

A pint of crude carbolic acid mixed with a gallon of kerosene makes an excellent spray for poultry houses, and it is the cheapest.

Dampness and contaminated ground are fruitful causes of disease. The quarters should be as dry as a chip, and the ground in the runs perfectly pure.

Frequent dumping and burning of nesting materials will thin out vermin wonderfully. Smoke out the nest boxes over the fire thus made.

It is hard to tell a water glass egg from a fresh egg, if the former is properly kept.

Charcoal is one of the most essential articles of food to the most successful poultry farming.

Few farmers and poultrymen know about the feeding value of bright well cured clover hay for laying hens.

If there is a pile of old house plaster anywhere on the premises, dump some of it in the corner of the poultry house.

The late hatched chick, as a rule, has a pretty strenuous time. It must run the gamut of almost every enemy known to poultry.

Liee multiply rapidly in hot weather if nothing is done to check them. The dusting will help greatly. Spade up a spot in a shady corner and watch the hens enjoy themselves.

Everyone who keeps cows and poultry on the same farm will find it profitable to reserve all the milk for feeding the flock, and

dispose only of butter fat. It is the best animal food that can be given them.

Fight lice by fighting dirt. It is useless to spray and powder if you allow droppings to pile up from week's end to week's end. Clean the house thoroughly at least weekly.

Be sure there is enough cool air enters the chicken house at night. Tightly closed coops or houses in hot weather are disease breeders.

All roosting quarters, need the closest attention as to cleanliness as to droppings, which should be removed frequently. Then the roosting places should be sprayed at frequent intervals to prevent mites from getting a start.

Some hens will lay an egg once in a while during the moulting period, but nothing should be expected other than that the great majority of them will not lay from the time they begin to moult until they have finished.

While your fowls are moulting, do not forget the ground bone. Mica crystal grit, charcoal and a little sulphur in their soft food once or twice a week will be found very beneficial to the moulting birds.

### About Fall Planting

As each year rolls around the question about planting trees, either in spring or fall, is one which forces itself upon the fruit growers of the entire country. It is indeed a question well worthy of the most earnest consideration. There are such great variations in climatic conditions that any rule or definite line of action cannot be laid down that will be applicable to more than one section. But there are general rules that may be followed with reasonable success.

Transplanting trees is always attended with some risk. Their nature should be fully understood, and they are not all constituted alike, by any means, nor are they able to equally endure the conditions with which they may be surrounded. Some will endure more exposure and drying of their roots while out of the ground than others, but they should all be considered, when out of the ground, like fishes out of water. There should be the greatest care taken of them, that their roots be kept moist all of the time and put back in the ground as soon as possible.

There are, also great differences in the ability of trees and smaller plants to endure the trying times that they may have to undergo after having been planted. The soil differs in the degrees of moisture it contains, even in a certain location, to say nothing of the marked differences in this respect that are characteristic of the various sections of the country.

To be more specific, apple and pear trees are more hardy than peach and plum tree, in the matter of transplanting. They can be left out of the earth longer and will endure more of the drying conditions that are likely to be met than trees of any of the stone fruits. The winter is apt to test the enduring qualities of trees that were planted the fall before, especially if it is dry and severely cold. It is by evaporating the sap of the trees faster than it can be supplied by their roots that injures them. The root must, therefore, be well and firmly planted in soil that is moist, if the trees are to pass the winter safely. And by this I mean moist but not wet soil. No one can tell what the winter will be, but it is safe to do the work in the most thorough manner. Pack the earth about the roots of trees that you plant as if they were fence posts. There is no danger of packing it too firmly. It is only by close contact with the earth that the roots are able to absorb the needed moisture.

I fully believe in fall planting of trees, grape vines and plants of the bush fruits wherever and whenever it is practicable. The reasons in favor of fall planting are abundant and good, wherever the objections do not overbalance them.

The most important one, as I look at the matter, is, getting the trees or whatever else may be planted an early start in the spring. By setting them in the fall the roots become well fixed in the soil and in many cases they form rootlets, or at least heal over the wounds on the roots before cold weather comes on. The earth settles firmly to the roots and when spring opens the trees are in condition to start

almost as if they had been in place during the previous year. An early start means a great deal to a tree.

There is often more time to plant in the fall than in spring. Everything is rushing at the latter season and it may be impossible to do the planting properly. If it is rainy and muddy there must be delay in planting, and sometimes far too long delay.

The soil is usually in better condition for planting in the autumn than in springtime. It should be moist of course, but I prefer to plant in dust rather than in mud.

Better trees can often be selected from uncultured nursery rows than to wait until spring.

Nurserymen usually sell at a cheaper price in the fall, because they have the use of the money earlier, and they do not have to care for the stock that is sold.

Study the situation fully and act promptly. Weigh all the points and if at all convenient try fall planting and know its benefits from experience.—H. E. VanDeman.

### Elderberry Syrup as a Cough Remedy

Take the elderberries when fully ripe, wash, mash and strain the juice through a jelly bag; to one pint of juice add a pint of sugar or good molasses (no glucose), boil twenty minutes, stirring constantly, and when cold add to each quart of the juice one pint of best French brandy, bottle, cork tightly, tying the corks down, and use for the coughs which attack delicate persons during the fall months on taking cold.

### What a Boy Can Do.

"A boy can be just as good a citizen and patriot as his father. It is not age, or voting power, not the ability to carry arms alone that are serviceable to one's country. First, the boy can see to his health. That is of high value to his country. Second, he can see to his education. Your country gives it to you, because an educated man is many times as valuable to it as an ignorant man. When you study you fight for your country. Third, you can hold true your morals and ideals. Perhaps that is the highest service of all.—"American Boy."

## Make Money on the Fruits You Throw Away

Spread apples and other fruit, berries or vegetables on the "Granger" Evaporator and go about your work. No attention, no bother. No sugar to buy, no jars. Evaporated fruits and vegetables are most wholesome and delicious and enjoyed by all the family. (All you need to furnish a supply for home use or for sale at a good profit, is a simple, well-built and reliable "Granger" Evaporator)

Use it by resting on back of kitchen stove. No extra cost for operation. Get one now for use this season. Save money drying your own products. Made in two handy sizes, at \$5 and \$10, delivered anywhere and guaranteed satisfactory or your money back. Write for Booklet H.

GRANGER SALES ASSOCIATION  
Lafayette Bldg., Philadelphia

## The Ounce of Prevention

Prevent injuries to your fruit trees NOW—don't have them girdled and killed by mice or rabbits this winter. Put an inexpensive

**EXCELSIOR WIRE MESH GUARD**

around each one. Can be set up in a moment and taken off next spring. Galvanized—lasts for years. Write for sizes and prices.

WRIGHT WIRE CO., Dept. P. Worcester, Mass.

## Personal to You

FOR months prices have been advancing for all materials which enter into the making of Green's Fruit Grower. While we have hoped that they would eventually return to normal, it looks now as though the former prices may not be reached again.

Since this is likely to make necessary an increase in the subscription price we want to urge our subscribers to protect themselves against such an increase by taking advantage now of our special price of **three years for one dollar.**

If you do not avail yourself of this opportunity you may regret it later on. We can make this special offer now, but how long this condition will last, we cannot say. Paper such as is used to print Green's Fruit Grower, costs double now, what it did one year ago. If this continues there can be but one thing left for us to do, and that is, to raise the price.

Whether your subscription is expiring right now or not, it will pay you to take advantage of this special offer, for you will then be sure to receive Green's Fruit Grower for at least another three years at the present price. Simply send a dollar bill and we will extend your subscription three full years from the time it expires.

Don't put off sending, thinking you will do it next week or next month; that may be too late. A little forethought now may save you considerable later on. A dollar invested in this way will bring you many times its value during the term of your subscription.—Send the Dollar Today.

Green's Fruit Grower Co., Rochester, N. Y.

Tree planting

## DU PONT

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Can you find the hidden words in the circle? Try it. The words form the name of a well known farm magazine. Send in your answer with your name and address at once and you will be considered in the awarding of the \$275.00 Harley-Davidson Motorcycle and 16 other Grand Prizes we will give away on October 31, 1916. Answer today and we will give you 1000 votes toward the \$275.00 Motorcycle. In case of a tie duplicate prizes awarded. Whether you win Motorcycle or not if you take part in contest you get a Valuable Prize and Cash Reward. Send Puzzle Solution NOW.

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A specimen copy of Green's Fruit Grower mailed free to any address sent by a present subscriber. GREEN'S FRUIT GROWER CO. Circulation Dept. Rochester, N. Y.

## Dairy and Creamery

#### DAIRY NOTES

All farmers should have a silo.

Cows need succulent feed in fall and winter.

Pure water and choice feed for the cows is the first need.

Keep all vessels scrupulously clean with hot water and soap.

Don't try to make first-class butter without a dairy thermometer. Precision in temperatures is important; guessing is dangerous.

In silo filling, cut corn one-half or three-quarters of an inch. That length insures less waste and a larger pack in the silo.

Another advantage of dairying is that it provides a steady income throughout the year. You harvest corn and wheat once a year. You harvest milk twice a day and turn it into ready cash.

#### Good Cream Pays Best

L. G. Rinkle, Missouri College of Agriculture says the American farmer who sells cream should insist that the creamery grade his cream. This will tend to cull out the poor quality of cream and make possible a better grade of butter. Give the creamery a good grade of cream and they can make a good grade of butter. Good butter sells for a high price, therefore top prices can be paid for the cream. Better cream prices stimulate the farmer in obtaining better dairy cattle and increase the desire for a more careful study of economical milk production.

An up-to-date North Carolina dairy farm puts its milk on the market mainly in the form of ice cream. Four men milk the sixty-five cows with electric milkers run by power produced on the farm. Artificial ice is also made on the place for transforming the milk into ice cream.

#### Bacteria Falling in Milk

The bacteria falling into milk from the air of the stable have long been considered

important factors in producing high counts. Investigations made in the stable of the station at Geneva and in several neighboring stables, as reported in Bulletin No. 409, indicate that under all ordinary conditions the number of germs so entering the milk is negligible.

#### Clean Empty Milk Bottles

As soon as a milk bottle is emptied, rinse it thoroughly with cold water. Do not return dirty bottles and do not use milk bottles except to hold milk. Returning dirty bottles to the milkman may mean that a few days later either you or your neighbors will get contaminated milk. Milk bottles should never be taken into a sick room. In case of infectious or contagious disease, all bottles should be boiled thoroughly and should not be returned to the dealer without the express permission of the attending physician. Such diseases easily can be made epidemic through disregard of this precaution. Bulletin 413, U. S. Dept. of Agri.

Improvement in agriculture must come from an intelligent and united effort to solve the questions that continually confront us. We assert unqualifiedly that there is nothing fundamentally or fatally wrong with agriculture, but there is room for great improvement in each of the thousand and one phases of it. The analyses show that it is the farmer himself that needs further development in spirit, technique, knowledge, and social adaptability. This would suggest, then, that the institutions which provide the opportunities for such improvement are most important, viz.: schools, churches, granges, farmers' clubs, co-operative business enterprises, etc. Still more must it be remembered that the most effective and lasting improvement in agriculture can be made only by properly educating and training the children—the future farmers.

"Have you heard that the fruit crop is a failure?"

"Yes," replied Farmer Cornatassell. "I knew somethin' about it before I read the reports. If the crop wasn't a failure ther'd be so much fruit that it wouldn't bring any

kind o' prices in the market. I can't see much reason either way for my gettin' interested an' excited."—Washington "Star."

#### "Ol Nutmeg's" Sayings

Written for Green's Fruit Grower By Joe Cone  
Sometimes the slow boss gits home fust.

It takes patience tew fish, an' some-thin' more tew ketch 'em.

Watermelons grow on moonlight nights—ef they ain't took 'fore mornin'.

Don't never a caount yewr chickens till they hev got by the "pip" age.

Fire-water is all right in its place, but its place is on a fire.

The under dorg may git the symperthy, but what's thet compared tew a good lickin'?

There is a time fur dignerty, but never a time fur sarcasm.

A loose character will git intew a tight place sooner or later.

Some people couldn't git ahead ef they didn't push someone else behind.

Ef wishes wuz hosses they'd be skeerd uv autermobiles jest the same.

Ev'ry dorg hez his day, an' some uv 'em have more than they orter.

It's all right tur give people credit, but they shouldn't keep it tew long.

Ef they wuz less writ abaout farmin' perhaps more people would make farmin' pay.

#### Farmers' Banks

To Mr. Green: Will you tell me what the farmers reserve banks are for? Can a farmer borrow money from these banks to purchase a farm with instead of giving a mortgage to some individual who may close the mortgage any time, or must they even give you a reasonable time? I am enclosing postage stamp for reply mail.—N. H. Gabler, Pa.

Reply: I know of no farmers reserve banks. Probably you refer to federal reserve banks, some of which loan on mortgages but some of them do not. Our largest bank in Rochester is a federal reserve bank, but it does not loan on mortgages.



Attractive Scene on a Dairy Farm near Rochester, N. Y.

Notice how clean and attractive is the milk room adjacent to the yard where the cows are milked. I remember years ago seeing a milk house through the center of which flowed a stream of water from a spring nearby, which cooled the room. How important that the cans should be kept clean as well as the hands and the clothes of the workers.

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# The Uneventful Life of the Farm Girl

Written for Green's Fruit Grower

By Mrs. Belle M. Patterson, Mich.

Reading a short article in one of the standard farm weeklies, purporting to be written by an ex-farm girl, in which she very much pitied and deplored the lonely unadventurous life of the average girl on the farm, the writer felt impelled to express a few thoughts along the same line, "only different."

She also was a farm girl, about twenty years ago, at a time when things were vastly different than they are today. She also went to a country school where the principal rule was "toe the mark," but where, by the way, together with many other things, we were taught the A B C's and to spell correctly, which is more than many city schools can boast in this advanced age of progress. She also attended a country Sunday school, and while our friend (who is now working in a store in the city) claims to have had no means of entertainment and amusement other than these, and thereby no inducement to stay in the country on the farm, I believe it was her own fault, as in both our public school and Sunday school the local talent made things lively in a social way the whole winter through. Little plays were gotten up and enacted with considerable ability. Much credit was rightfully given a class of girls, who, under the direction of an old general in the army, organized what was known as the Broom Brigade, a drill, by which they raised about \$150. This sum was used to buy an organ and other necessary and useful articles for both the church and school-house.

In these times of modern conveniences, the telephone, electric and acetylene lights for the farm home, the many interurban lines running through the country, automobiles owned by many of the farmers, and schools of the most up-to-date type accessible to all, we cannot understand why the girl, or boy either for that matter, requires or merits any pity from their closely confined city friend, who scarcely sees daylight the whole winter through, perspiring and even fainting under the electric fan in the summer, having for her principal amusement the cheap (in every sense) moving picture show.

The writer remembers almost with reverence the joyful neigh of her very own saddle horse (long since passed away) as she gaily went to the pasture for him, back through the orchard, nibbling the juicy Snow apples on the way. She would give one to her old chum, and as he carefully bit it in half, stroke his glossy neck and ask: "Want to take me to town, Jim? Mother needs a spool of thread and I have an errand there also." She can still see the look of real pleasure in his bright eyes, and the sharp upright ears, as she let down the two upper bars of the gate to the lane and bade him jump the other two. Then as saddle is adjusted correctly, she brings him to the old horse-block and from thence jumps into the side-saddle (now a thing of the past), and down the dusty road they go, or rather fly, for mother says they are home before she has hardly "turned round." Nothing on the farm to interest the girl? Then pity the farm, or the owner, or the girl. Something must be wrong with one or all.

What though the sun is hot during berry-picking time, and the hands are stained and tanned. What though at early sunrise the call "Breakfast!" is heard. While the weary city neighbor is trying in vain to sleep off the wearing nerve strain of yesterday's toil among the many people who have tried her patience to the breaking point, and last night's entertainment, you are out in the open gathering the luscious fruit, breathing the pure air, passing an innocent jest to companions in the field, thereby causing peals of laughter to ring out upon the clear air, on which no one has a mortgage.

Don't worry, my friend, about the boys wishing to look for a wife among the pert, palefaced, stylish city girls, if you, with your wealth of natural attraction, do your part, and make yourself worthy and appreciative of the many advantages and blessings all about you.

Remarks by the Editor: I have often alluded to the possibility of improving the opportunities and general welfare of the farmer's wife and the farmer's daughters. Many of these good people are deprived of privileges and pleasures in which they

should participate. Sometimes these good women are themselves in a measure to be blamed for the present condition of affairs, but in many cases it is the husband and father who is negligent or thoughtless or inconsiderate. If the father is so selfish and so blind as not to realize that his wife and daughters should have every opportunity to enjoy such limited facilities as there are in the country for social enjoyment, he is making a serious mistake. The church is or should be the leading social medium in the rural districts. If the farmer shows no interest in the church and is not willing to give his wife and daughters opportunities of attending the church regularly and of attending the church socials, he should be censured.

If the farmer or fruit grower does not interest himself in the neighborhood feeling, making friends with neighbors and doing something to bring about social gatherings of the neighbors, he is not doing all that he might do to make it pleasant for himself, his family and his neighbors.

The daughters of the family should have an opportunity to meet intelligent and worthy young men. Sometimes, but rarely I trust, the father objects to his daughter meeting young men, fearing that one of the young men may marry the girl and thus remove from the farm a helpful member. Do not object to the church being something of a matchmaking institution. It is coming to be generally understood that the church which is not more or less of a matchmaking institution, furnishing opportunities for the worthy young men to meet worthy young women with the object of matrimony, is not properly filling its office.

There is no more Lucullan feast than this  
At which I daily sit;  
Laughter and sunshine, love, a tender kiss  
These are the sweets of it.

If, by some chance, black storm clouds  
lowly bend

My unresisting head.  
It is no symbol that joy shall end.  
For still my feast is spread.

A day will come with laughter just as sweet,  
The sun will fill the air,  
Love still be young, but other lips will meet;  
I shall have had my share!

## Have a High Food Value

Grapes, peaches, apples and pears are all rich in acids and salts, and in addition they contain a large percentage of the carbohydrates, proteids and fats which we associate with such foods as meat and bread. Almost any fall fruit has such high food value that the housewife is justified in preserving it in a variety of forms, to meet the demands of winter appetites for solid substances and nutriment.

Canning is the cheapest method of preserving fruits and the purest. Jam, fruit butter are all more palatable and nutritious, but the latter to be perfect must be absolutely smooth which requires constant stirring in the final stages.

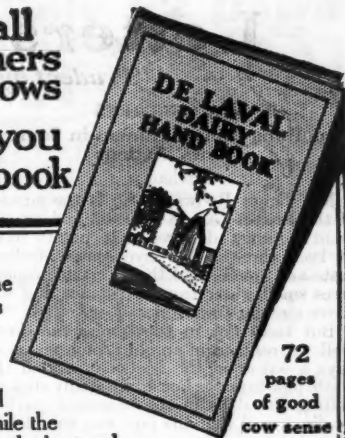
As a large quantity can be handled almost as easily as a little, it is best to make considerable butter at one time. Bacteria cause little harm in stored butters, but they must be protected from molds; this is best done by sealing them in jars in the same manner as canned fruits.

In jelly-making power, crab apples probably take the lead, followed in order by apples and grapes. These fruits contain considerable quantities of a substance called pectin, which causes the sweetened juice to harden when heat is applied. Peaches and pears contain too little pectin to make good jellies, but may be used for this purpose in combination with crab apples. A wide variation in the flavor of jellies can be obtained by the addition of different



# FREE to all owners of cows

## If you keep cows you ought to write for this book



72 pages of good cow sense

THIS book was written for the man with only two cows just as much as for the man with twenty. In it has been gathered together a great fund of valuable information on subjects which are of vital interest to every cow owner. And while the various phases of dairying are treated by the best and highest authorities, it is not a technical treatise but is written in plain every-day language so that even the children can understand it.

Here are just a few topics that will give you an idea of the practical nature of its contents:

"How a Dairyman Made Good"—a real story of a real farmer, who starting with almost nothing, built up a fine dairy herd and made a big success.

"Year Around Feeding of Dairy Cows"—by an authority whose advice is well worth heeding. The importance of proper feeding deserves more attention from every cow owner.

"How to Judge a Dairy Cow."—shows by illustrations what points to look for in a dairy producer—explains the essential qualifications of a good dairy cow.

"Building Up a Dairy Herd"—a practical breeder gives some sound advice on this important subject.

"The Farm that Won't Wear Out"—shows that the farm where cows are kept, and the fertility returned to the soil, improves instead of deteriorates.

"The Care of Cream on the Farm"—quality is as important as quantity. It costs little and brings big returns.

"Silos and Silage"—one of the best chapters in the book. Full of silage facts that every farmer ought to know.

Then there are splendid articles on "Alfalfa," "Ventilation of Dairy Barns," "Breeds of Dairy Cattle," "Improving the Herd with a Good Bull," "Care of Freshening Cows," "How to Test Cows," etc. Numerous dairy rations, suitable for various sections of the country, are given, and various milk and dairy tables as well as tables of weights and measures, silo capacities, etc. that every farmer has occasion, at some time or other, to refer to.

Thousands of dollars have been spent in the preparation of this book, and if you keep cows you certainly ought to write for a copy and read it from cover to cover. The book is absolutely free. Just fill out the coupon or send the information requested on a post card, mentioning this paper.

## The De Laval Separator Co., 165 Broadway, New York

Please mail me, postage free, a copy of your New Dairy Handbook. I keep \_\_\_\_\_ cows  
I sell cream, make butter, sell milk (cross out whichever you don't do). The make of my

Separator is \_\_\_\_\_, used \_\_\_\_\_ years

Name \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_ RFD \_\_\_\_\_

197

flavoring matter and by combining various fruits. With the abundant material available in the fall, no housewife should be content unless her jelly is first-class. The color should be pleasing to the eye, the flavor pleasing to the taste, and the texture such that a glass of jelly when turned into a plate will roll about without sticking or breaking into pieces.

Dried fruits are so nutritious and so welcome as a change in the winter menu, that the surplus fruit should be utilized in this way. The work is not so trying as it seems; a little time is required each day, but after the process once begins only a little labor daily is necessary. As the fruit shrinks rapidly in the early stages, handling it becomes easier as the drying progresses.

We surely appreciate the "Fruit Grower." It is one of the most prized periodicals that comes to us and we take nearly two dozen papers in all.—Dr. L. D. Caldwell, Va.

I am sending a dollar to renew my subscription to the "Fruit Grower." We would miss its monthly visits very much as I think we have taken it nearly all the time since it was first published. We like it all, but especially the editorial pages.—Leola L. Edson, Mass.

Green's Fruit Grower. "Signal Service" Barometer received, and it is a beauty. I thank you.—Clarence F. Kephart, Pa.

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# Letters From The People

"Prudent questioning is the half of knowledge."—Proverb

## SENSES OF TREES Something Almost Human in Some of Plants' Actions

Exchange

Mr. James Rodway, who is the curator of the British Guiana museum and an eminent botanist declares that plants have at least three of our five senses—feeling, taste and smell—and that certain tropical trees smell water from a distance and will move straight toward it.

But trees not in the tropics can do as well. A resident of an old Scotch mansion, says a writer in the Scotsman, found the waste pipe from the house repeatedly choked. Lifting the slabs in the basement paving, he discovered that the pipe was completely encircled by poplar roots. They belonged to a tree that grew some thirty yards away on the opposite side of the house.

Thus the roots had moved steadily toward the house and had penetrated below the foundation and across the basement until they reached their goal, the waste pipe, 150 feet away. Then they had pierced a cement-joining and had worked their way in long, tapering lengths inside the pipe for a considerable distance beyond the house.

There seems something almost human in such unerring instinct and perseverance in surmounting obstacles.

## Ohio Fruit Queries

Mr. Chas. A. Green:—1. How can plums be prevented from rotting after reaching full size, i. e., about the time they ripen. Even the Damson rotted somewhat this year.

2. I am preparing a strawberry bed. About July 10, I plowed a thin sod and sowed it in cow peas. I am going to plow these under as soon as the growing season is over. Shall I sow rye then for winter cover or will it be too late to do any good? I will plow in the spring and apply some good fertilizer. How shall I apply it? How much? And what kind? The soil is not strong. I do not wish to use any barnyard manure. The plot contains 3200 sq. ft. Please answer in The Fruit Grower.

3. What about fall bearing strawberries?—James G. Keeling, Ohio.

Reply: 1. At Green's Fruit Farm we find that the plums most liable to rot are those where the fruit is so crowded on the trees that each specimen is touched on all sides with other plums. Where the fruit is properly thinned or with varieties that do not set abnormal quantities of fruit, rotting is not so frequent. The Damson and Lombard set fruit in such vast abundance they sometimes rot owing to the connecting ropes of fruit that appear on every branch. While a spray of Bordeaux mixture or any fungicide spray in July might be helpful, I think it could not be relied upon in all instances to prevent rot.

2. In preparing ground for a strawberry bed or plantation, one of the main things is to subdue the soil thoroughly, destroying all grass and weeds. A potato or corn field that has been well cultivated the past year will be a good place for starting a strawberry bed or plantation, but the soil should be naturally well drained or else drained by tile.

As regards fertility, any soil that will produce good corn, wheat or potatoes will produce a good fair crop of strawberries, but you can nearly double the yield of strawberries by applying stable manure the year before planting, or by applying about 500 lbs. of ordinary commercial fertilizer containing potash, phosphoric acid and nitrogen. 200 or 300 lbs. of nitrate of soda alone would help the yield, but it must not be applied until the plants

## Whys and Wherefores of Fall Spraying

is the title of a little booklet, giving seven reasons, official and non-official, why it is the best time to spray. This booklet will be sent out by the B. G. Pratt Co., 50 Church St., New York, manufacturers of the well-known "SCALECIDE" at a very early date. If you are not on their mailing list, send them a postal today giving the number of your trees and your dealer's name and you will receive a copy free. Address Dept. F.

have grown substantially to take up the fertility, otherwise the nitrate of soda will leach away and disappear. The objection to stable manure is that if not applied the year previous, it contains the seeds of grass and weeds. I have known a thousand pounds of commercial fertilizer, known to the farmers as phosphate, containing potash, phosphoric acid and nitrogen, to be applied to one acre of strawberries, but this is an excessive amount and should be applied with discretion and not all at one time. The foliage of strawberries may be injured by applying chemical fertilizers, especially when the foliage is wet.

I have had no success with fall bearing strawberries.

## Budding and Grafting

Green's Fruit Grower: I note your article as to "Treatment of Root Grafts." I take it you use roots from seedlings. Could good, vigorous and fibrous roots from old orchard trees be grafted successfully upon scions to act as feeders until scions threw out roots of their own?

Could apple scions be successfully grafted upon pear seedlings?

Can peach seedlings be dug up and budded this spring, or must they be budded in the row and possibly later in the season?

We have many hickories and black walnuts. Could they not be grafted into better and larger varieties? They are too small to be of value commercially now. Is it difficult to top work nut bearing trees?—E. V. W., Indiana.

Reply: Probably healthy, fresh dug roots from large apple trees might do for root grafting, but I have never seen any roots used except those from one or two year old seedlings.

Apple scions could not be successfully grafted on pear seedlings.

Peach seedlings are not transplanted. Seed planted this fall sprout and begin to grow in May and are budded where they stand in the latter part of August.

The grafting of nut trees is difficult. No one but an expert can expect to succeed in grafting nut trees.

## Apricots

Green's Fruit Grower: Will you kindly tell me why my apricots split open just before ripening and crack all over? This has happened for three years, or ever since the tree began bearing.

What kind of wire is used for trellises in vineyards?—Alfred Marzotati, N. J.

Reply: I have had no experience with the fruit of apricot trees splitting, therefore do not know what to recommend. They do not split in this locality.

What we used to call ordinary fence wire is the kind most often used for grape vine trellises. The main thing is to have it large enough to strongly support the vines and to resist rust.

## An Old Apple Tree

Mr. Charles A. Green: I am sending you several apples from trees that are over one hundred years old. The largest tree measures over seven feet around trunk and still bears good crops. I understand they seldom miss. I have only owned the farm about five years. Richard Hill, the wealthiest man in this section of his day, set them. His daughter, who lived on the adjoining farm and who died last October in her 93d year, remembered well the trees bearing when she was a girl, and ate apples from them almost all her life. I bought the farm of a grandson. Can you name the apples?—Elza Sickles, Pa.

Reply: Accept thanks for the beautiful apples which you so kindly send me. The skin is yellow, well covered and splashed with red. The size is medium or smallish. The quality is good, mild sub-acid. Flesh yellow. I cannot name them.

## Apple Cider and Fruit Growers Scrap Book

Green's Fruit Grower:—Can you tell me how to make apple Cider stay apple Cider and not ferment? Can you put me in touch with a man that thoroughly understands making apple cider and apple vine-

gar as I want to put in a plant to work up my cull apples.—F. B. Wright, Wash.

Reply:—Every season Green's Fruit Grower has published methods of keeping cider sweet. Those interested in cider making should make clippings treating of this subject, so that they can refer to them later. An indexed scrap book is a handy thing for any business, particularly for the fruit grower. You could have different departments: one on cider and vinegar making, another on insects and insecticides, another on picking, gathering and marketing apples, another on strawberry culture and marketing, another on raspberry culture and marketing, another on quinces, cherries, peaches and other fruits, with an index stating on which page to look for the clippings treating of the subject desired.

I do not know where you can get the man you want.

## Peach from Sandy Lake, Pa.

Reply: Accept thanks for the large and handsome peach which you so kindly have sent me. It is a freestone peach with deep yellow flesh and yellow skin. It seems to be a good shipper. The quality is fairly good. You say it reproduces itself from the pit. There are some peaches that will do this. There is an inclination in all of the Crawford type of peach to reproduce itself, and yet Samuel Rump had twelve acres of seedlings, among which he found only one variety which was of notable value, and this proved to be the Elberta peach, which has been worth millions of dollars to this country. I should be glad to receive some of the seed, as you suggest.

## Black Knot on Plum Trees

I have a young orchard of plum trees and black knots are coming out on them. Cutting them off doesn't seem to do any good, so I am enclosing a stamped envelope and will you kindly answer me as soon as possible telling me what to do for them.—Mr. John Wheeler, N. H.

Reply: At Green's Fruit Farm we are not troubled with black knot on plum trees, largely for the reason that we keep our plum trees in well cultivated soil where they are growing thriftily. I have noticed that black knot is most serious in plum trees that are neglected and that receive no attention or cultivation. When black knot does appear the affected branches should be cut off immediately and burned. If trees are vigorous they resist germs of disease, just as healthy, strong men resist disease germs that might destroy or endanger men more worn out or feeble.

## Reply to Massachusetts Letter

Thanks for your interesting letter. The Joseph Harris mentioned is the one you refer to. He had great success in growing the most beautiful Northern Spy apples. A barrel of these Spy apples from his farm was received and accepted by Queen Victoria. Probably nothing finer in the way of Spies ever crossed the ocean. The orchard is about forty years old. I have known it for nearly thirty years but have never known the soil to be cultivated in this orchard. Swine were confined there and they did some cultivating with their noses in tearing up the sod.

## How to Apply for Work

An eighteen year old girl from Texas wishes to secure a position as clerk in a dry goods store, but so far has not been successful. She is now going to apply to another store and wants to know:

1. What to say if she has an interview with the manager.
2. What to write if she applies for a position by letter.
3. What to telephone.

Reply: Large department stores employ a man whose principal work is to pass upon the qualifications of applicants for work, that is he hires and discharges the clerks. This man is skilled in reading character and in sizing up the ability of an applicant. His first inquiry will probably be, "What

can you do?" Do not say, as usual, that you can do almost anything, for there are many things you cannot do. You cannot run an engine, a street car or an automobile. Tell him candidly what you think you are best fitted for. He probably will ask you what kind of work you have been doing. Your answer should be truthful.

If you write a letter asking for a position, your penmanship will be a recommendation or a detriment, as will your method of expression and spelling. Write plainly, indicating what you are best qualified for and what wages you expect.

I would not telephone in any instance asking for a position, or for information about a position. The firm to whom you apply desires to see the applicant. The applicant is an unknown quantity until she has been seen and has been questioned. Be neatly and cleanly dressed, but not showily.

Do not be satisfied after having been rejected by one, two or three places where you have looked for employment. Keep looking for weeks and months. Never say fail.

## Dangerous to Orchards

Mr. Charles A. Green: Will you please let me know through The Fruit Grower if red cedar trees around an orchard will give plums, peaches and apples the cedar rust? My plums and peaches rot on the trees. I have heard it said that cedars cause rot. Are hogs running in orchard injurious to it?—D. A. Moore, Iowa.

Reply: It has been stated through the rural press that cedar trees do convey to fruit trees a rust or fungus that is injurious, but I have had my doubts on this subject. I have not seen it stated that cedar trees caused rot in plums or peaches and do not think they are responsible for the rotting.

## Pears from Apple Scions

Mr. C. A. Green: I once grafted a pear into a healthy apple tree. I got no apples, but I did get some of the finest pears I ever saw. But it evidently grew too fast, as one year while it was well laden with fruit, there came a strong wind that broke it off at the stub.

I also had experience in grafting the red garden cherry, also a sweet cherry, the May Duke, I think, into the little red, wild cherry, that grows so plentiful in some parts of York state. This took place about 4 miles south of Rochester where I then lived.

The cherries all did well. I have reason to believe that the pear will do well, grafted into the apple. This took place about the year 1850.—Joel E. Parks, Mich.

Editor's Note: I have made apple scions grow temporarily on pear tree. I have not supposed it possible that a pear tree grafted to apples would, from the apple scions bear pear fruit.

## Ants Attacking Small Fruits

John Lusetti writes that the ants seem to be injuring his currant bushes and other small fruit plants and asks for a remedy. Any insect that eats the foliage can be destroyed by a poison spray like Paris green or arsenate of lead. I have never known ants to do injury such as you mention.

## Do Woodpeckers Get Drunk?

The question is seriously asked by Professor Burges Johnson in "Harper's Magazine" as the result of certain observations in a camp in Maine. Eminent naturalists to whom Professor Johnson wrote disagree. Ernest Thompson Seton says: "The story of woodpeckers getting drunk on fermented sap is an absurd fable." John Burroughs answers: "Both birds and insects might get drunk on the fermented sap." Ernest H. Baynes, of Meriden, N. H., says: "I do not think it impossible, perhaps not improbable." Professor J. B. Watson, of Johns Hopkins, says: "I have seen robins in a 'loggy' condition upon over ripe berries in the south." The above is from the Outlook.

C. A. Green's Reply: Surely it is possible for birds or any other animals to become drunk. I have heard, but cannot vouch for the truthfulness of the statement, that a farmer found his turkeys apparently dead upon his lawn. He picked them and placed them in a pile on his porch and went in to supper. To his astonishment on his

return a few roaming a few manner. I upon bran thrown out. But the fact is no more than that queer manner fruit juices from the rays in birds

In Green's Fruit how I can m trees out of I am seriously firewood? I think of or the fruiting success. I p pruned in s good, but it Now I ask y had better cu they are a of new growth lot of shoots them. I do n plum, but th I am a subs think it canno Thomas Saile,

C. A. Green are prolific be more fruit than the trees, I fe trees are of varieties, and rooted and bu old plum trees of fungus disea varieties of pl blossoms.

The plum is today that it the trees, I fe There are man excellent qual any other fruit possessed of g to this it is hig for canning and When evaporate California the wholesome and

Mr. Charles black spots on what will prev causes apples to they have form drying up.—M.

Reply: The caused by fun would be an ap ture in connecti I cannot say as you suggest.

to do with blossa ring rains may be fungus may bec mature fruit. A are not troubled

## Clearing

Green's Fruit moved into the large lots that a elderberry trees, if these trees an acids and chemi soil. I expect t in the fall and if how to prepare t appreciate same. and dug up the so the ground seems ing well.—M. H.

Reply: You ha the land of locust which send up sh I know of no re the roots and kee by plowing for se farm crops can b land is subdued. plants on such s elderberry are e

## Fruit Advice

Mr. C. A. Gree read on this farm I am a farmer

return a few hours later he found the turkeys roaming about the place in a drunken manner. He discovered that they had fed upon brandied cherries which had been thrown out into the yard by the housewife. But the fact that animals are acting strangely is no more indication that they are drunk than that men are drunk when they act in a queer manner, as men often do. I doubt if fruit juices can develop enough alcohol from the rays of the sun to cause drunkenness in birds, but this is not impossible.

#### In the Plum Orchard

**Green's Fruit Grower:**—Can you tell me how I can make profitable and good bearing trees out of an orchard of plum trees which I am seriously thinking of cutting down for firewood? I have done everything I can think of or have ever heard of to promote the fruiting qualities, but have had no success. I plugged some, tied some off; I pruned in summer as I heard that was good, but it did not seem to help much. Now I ask your opinion. Do you think I had better cut them down? It seems a pity as they are all nice old trees and make lots of new growth every year, also send up a lot of shoots out of the ground all around them. I do not know the exact variety of plum, but they are a large yellowish red. I am a subscriber to your paper and I think it cannot be beat for a fruit grower.—Thomas Saile, Pa.

**C. A. Green's Reply:** Since plum trees are prolific bearers and as a rule produce more fruit than is desirable for the good of the trees, I feel confident that your plum trees are of no value, being worthless varieties, and that they should be uprooted and burned. I say burned because old plum trees are liable to contain germs of fungus diseases. It may be that your varieties of plum are not self-fertilizing in blossoms.

The plum is not receiving the attention today that it should receive on its merits. There are many varieties that are of most excellent quality, scarcely surpassed by any other fruit, juicy, high flavored and possessed of great beauty. In addition to this it is highly prized by the housewife for canning and for many other purposes. When evaporated or dried as they come from California they are highly nutritious, wholesome and appetizing.

#### Apple Inquiry

**Mr. Charles A. Green:**—What causes black spots on the surface of apples, and what will prevent the same. Also what causes apples to fall from trees just after they have formed, the stem of the apple drying up.—M. Adelman, Mass.

**Reply:** The black spots are probably caused by fungus. If so, the remedy would be an application of Bordeaux mixture in connection with a poisonous spray. I cannot say what causes apples to fall as you suggest. The weather has something to do with blossoms falling. Heavy drenching rains may have this effect or some fungus may become attached to the immature fruit. At Green's Fruit Farm we are not troubled in the ways you mention.

#### Clearing off New Land

**Green's Fruit Grower:**—I have recently moved into the suburbs and have several large lots that are covered by locust and elderberry trees, will you kindly inform me if these trees and roots can be killed by acids and chemicals without injuring the soil. I expect to plant some fruit trees in the fall and if you will kindly inform me how to prepare the soil I will very much appreciate same. I cut down some trees and dug up the soil for vegetables and while the ground seems good, things are not growing well.—M. H. Cornfield, Pa.

**Reply:** You have a serious job to clear the land of locust and elderberry, both of which send up shoots from pieces of roots. I know of no remedy except to grub out the roots and keep the ground cultivated by plowing for several years. Meanwhile farm crops can be grown there until the land is subdued. Do not plant trees or plants on such soil until the locust and elderberry are eradicated.

#### Fruit Advice Wanted in Michigan

**Mr. C. A. Green:**—Your paper has been read on this farm for perhaps thirty years. I am a farmer and fruit grower as my

father was. I want to ask a few questions and would like a personal reply.

The land on my farm is too heavy and has too many depressions for good berry land, so I bought five acres of sandy land and set it to berries. I bought red raspberry plants of a nursery with certificate of inspection, but in two years crown gall and root gall had worked such havoc that I plowed up the reds. I used the land two years ago for potatoes, beans last year, and buckwheat with June clover seeding this season.

1. Do you think it would be safe to plow under buckwheat and seeding and set out next spring to red raspberries again of good stock? Would the germs of crown and root gall still be in the ground?

2. Part of my five acres was set out to black caps and blackberries. Although last winter was a mild one, they winter-killed badly, and I find a lot of them affected with crown gall, sometimes a foot high. Anthracnose is bad also. Can I do anything for the gall, and would it pay to spray for anthracnose?

3. The plants were set deep enough but the canes form too near the surface, so they blow out easily and grow more sprawling than usual. Does the gall or anthracnose cause this?

4. I am eager to have a berry patch as I can get pickers easily at a nearby village. A neighbor wants me to plant an acre of his land on shares. Do you think this would pay, and what share could I afford to give and I furnish the plants, set them out, and do all the cultivating, trimming, furnish baskets, crates, etc.?

5. Do you think it would be wise to use plants layered from the old patch mentioned above? If so, would the tops of the black caps need spraying? It has been many years since I have asked you any questions, but you have so many inquiries from others that I know you must be very busy.—W. E. Cody, Michigan.

**Reply:** 1. While I do not recommend as a rule the planting of the same tract to the same fruit which has been growing there years previous, I see no serious objection to planting the red raspberries after the land is well subdued. Yes, there would be more danger of root gall on such land. Root gall is not so frequent on hill ground that is well drained.

2. If your plants were injured by the mild winter of 1914-15, the indications are that your location is a severe one and that you need hardy varieties. I know of no remedy for root gall. Ask your experiment station as regards anthracnose.

3. I do not think that gall or anthracnose has the effect you speak of.

4. I do not advise my friends to plant fruits on shares since it is difficult to decide what share the grower should have and what part of the expense of picking, cultivating and the purchase of plants the owner of the land should provide for.

5. I would not use young plants secured from a diseased plantation.

#### Good to Eat at All Times

Fruit in one form or another should appear on the table at every meal. With a little care you can vary your desserts or refreshing drinks, so that your family can always have that zest on coming to the table, that is such an aid both to appetite and digestion.

The most useful fruit of all is of course the apple, but at this season of the year berries and other fruits come to take its place, and we relinquish it till next fall. Oranges and grape fruit are still with us, and with different treatment from that used in winter, are very delightful. They should be thoroughly chilled, and indeed may be half frozen if desired.

He thrills to hear the crickets croon  
Beneath the arches of the noon,  
When the red harvest promise smiles  
From all the fruited orchard aisles;  
And gleams more glory from the hues  
That on the hill slopes flame and fuse—  
Senses in them a stronger spell  
Than in the radiant dyes that glow  
On canvases by Raphael  
And Angelo.

Experience has shown that copper and brass or other copper alloys should not be used as piping for acetylene gas supplies, and that iron should be well tinned rather than galvanized or nickel-plated.

We hear much of preparedness for war, but the Railway Business Association has pointed out one way to prepare for peace. Will our legislators have the statesmanship to grapple with this problem, the pressing one of our times and one that interests every worker, every business man and every investor?—Leslie's.

Troy "Times"—Cleaning up and keeping clean go together, and with them the love for the beautiful that finds expression in flowers, foliage and verdure. The season when the earth makes its finest display is at hand, and everyone can do something to make the home more pleasing to the eye. The poorest can afford at least a potted plant, and that would give a touch of nature's charm to the home.


The new bridge across the Tiber at Rome, having a span of 328 feet, is the longest reinforced concrete arch in the world.

Applying electric currents to the base of the brain, a Berlin physician has found a way to give sleep to the sleepless.

Spain in 1915 mined 2,402,000 tons of coal and imported 1,200,000 tons.

There is a great demand in Poochow, China, for American made clocks.

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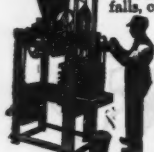
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# Small Fruits

### The St. Regis Raspberry

Editor Green's Fruit Grower:—In a late issue there appeared an inquiry regarding the St. Regis (everbearing) raspberry. In answer to this inquiry I should like to tell what I know about this berry. A small plantation was set out in early May, 1915, (about 500 plants.) At the same time 300 Cuthbert were planted. The St. Regis made twice the growth of the Cuthbert. In fact the St. Regis did exceedingly well while the Cuthbert did very poorly. The two varieties were planted side by side. The St. Regis bore very heavily this year. The berries are large, dark red, not in any manner coarse in appearance, excellent in flavor (to my mind an improvement over the Cuthbert), good shippers, keeping quality the best, (we kept several pints 3 days in a cool room although picked too ripe for shipping, and the berries did not fall in the center as usually is the case.)

We picked every other day for 3 weeks and have at this time one or more pickings left. They are about one week earlier than Cuthbert with us.

This variety stands severe winters as well or better than Cuthbert, they are vigorous growers, and suit us so well that we intend to confine ourselves to them exclusively for commercial purposes. Although they are so-called everbearing, any one intending a tryout should not consider this feature at all, as the continuous crop would not amount to anything. Like most everbearing fruits they will have a few scattering berries throughout the summer, merely enough to give them this characteristic.

A large per cent of new shoots will bear two or even three dozen berries, some an inch across at the base, but this should not be permitted as it weakens the shoot. It is much better to force the shoot to wood and confine its bearing to the proper time. Or if it is permitted to bear it should be removed with the old canes so as to direct growth into shoots which will bear the next year.

Any grower of reds, (blacks as well) who wishes to have large berries at the end of the picking season will bear in mind that to do this it is absolutely necessary to limit each parent root to not over 3 new canes or shoots even in very rich ground. The new shoots and canes attain a size at this season which taxes the parent root to the limit to maintain, and so leaves less nourishment for the tail end of the crop.

This year in tipping new canes in blacks I found long shoots with bloom on the tips.

They appeared to be new canes, but on examination they were merely shoots of the canes near the base but above ground. The berries on them were very large. We tip the canes when they reach a height of about 20 or 22 inches. I expect to tip some at about 15 or 16 inches. Then tipped so they will ride shoots to a length of even 6 or 8 feet. It may be that if tipped at about 16 or even 14 inches they will send outside shoots in plenty and reduce the trunk of the cane thereby producing even better berries.

This year canes 20 and 22 inches high with 8 and 10 side shoots had so many berries that the weight pulled them over.—Chas. Billheimer, Ind.

You can tell poison ivy because it has three leaves and a hairy stem. Look for the hairy stem, that is a sure sign. Poison sumac has white berries instead of red.

If plants are watered at night they have a better opportunity to absorb the moisture than in the daytime, when the sun dries the soil very rapidly.

If troubled with weeds along gravel walks, sprinkle salt along and they will die.

### The American Grape

VITICULTURE is the oldest branch of horticulture, dating well back into antiquity when our civilization was young, says Earl Percy in Pacific Homestead. It is native speaking now of the Vinifera or European grape of Persia which is the cradle of the Arryan race. Seeds have been found with the Egyptian mummies buried probably 5000 years before Christ's time. Complete cultural directions were compiled by the historian Hesiod 3000 years ago. The white race has taken kindly to this polymorphic fruit from its infancy and as "the course of empire wended westward" the grape accompanied it thriving or perishing as the conditions permitted.

The history of the persistent attempts to introduce the European grape into America is a record of repeated failure. The climate of the Atlantic coast was unfavorable and recourse was finally had after 200 years of patient effort to the wild native grape. The real foundation of the American grape industry dates in the year 1849 when Ephraim Bull introduced the Concord. It is a seedling of a wild seedling and is the progenitor of most of our named varieties of today, being itself the valuable. Several varieties, notably the Isabella and the Catawba, were grown earlier but gave place commercially to the blood of the Concord.

Grapes are relished by all classes of people as fresh fruit in season and as jelly and juice throughout the year. Considering the ease with which they can be raised it is to be regretted that so many farm homes are without a single vine. There are several regions in Oregon where the American grape is grown in a commercial way. Near Oswego and in parts of Washington county thriving vineyards are cared for. Consumption of grapes in the towns and cities can be increased greatly if the markets are kept supplied with sweet ripe ones in season. A sour grape is an abomination and seldom encourages a repeat order.

The Concord, Worden, Moore's Early, Diamond, Niagara and Delaware are the varieties largely planted in Oregon. The Concord is late in ripening and unless an early slope is to be had should be left alone as occasional losses of fruit more than offset its other good characters.

**Apple Conundrum.** Given a boy, an apple tree, an apple, and a bird perched on the apple. How can the boy get the apple without disturbing the bird? The answer is, by waiting until the bird flies away from the apple.



The above portrait so greatly resembles Henry Ford that the reader may conclude that the Ford automobile man has entered the field as a fruit grower, but such an idea is not intended to be conveyed. Our thought is that subscribers to Green's Fruit Grower are likely to have an abundance of home grown, freshly picked fruits, and to be surrounded with an attractive lawn with groups of shrubs, vines and trees on the borders, and with grape vines climbing up the walls of the dwelling and around the out buildings. Notice the happy expression on the face of the man, all of which fruit growing suggests.

### Making Apple Cider

Editor of Green's Fruit Grower: In one of your late issues I notice an article in relation to making vinegar from apple cider.

Some years ago I had considerable experience in a cider mill of my own and it is possible I may give your readers some useful information on the subject.

Not pleased with the arrangement and management of ordinary custom mills, I first fitted up a small fixture for my own use, worked by hand, to make sweet cider for apple sauce, jellies or other purposes. Presently the matter got noised about and we had calls from outside parties "to make a little just for us". "We never knew what cider was before", and the result was having a small steam engine. I enlarged my works and worked for customers. I had no bins, nor allowed a pile of apples to be unloaded about the premises, saying to all inquiries: "If you have not casks enough, bring some bags or baskets, for no fruit shall be here to freeze and rot. Neither will make good cider or vinegar, and a pile or bins of apples allowed to 'heat' will not make cider capable of a second fermentation, though the undamaged fruit may with the mixture produce a rosy, miserable product called vinegar by those who know no better.

Making vinegar in the ordinary way is a slow, wasteful process, destructive of casks and loss by evaporation and leakage.

I had large, open tanks, holding ten to thirty barrels standing adjoining my engine room, and when the engine was running for any of its purposes, threshing, grinding feed, sawing wood, cutting or steaming feed, a small bellows, such as were used about the old fire place, being attached to the crosshead, was forcing warm air through wooden tubes to the bottom of these tanks to boil up through the fluid, agitating, aerifying and acidifying the cider.

We frequently made cider from choice, sound fruit, cleanly harvested, pressed in cloth in powerful presses that showed by saccharimeter, 20 to even 26 degrees, while the product by some mills under the care, less, if not absolutely dirty method showed only 12 or 13 degrees.—James S. Ingalsbe, N. Y.

### Cider That Will Not Turn to Vinegar

Green's Fruit Grower: Taking for granted Green's Fruit Grower is as much interested in the ultimate result of the grown fruit and as such result, to the extent of some barrels of cider 10 years old and getting a shade too hard for a beverage, but which refuses to turn to vinegar, I would ask: How can I turn them to vinegar?

I think it is crab apple cider. It sparkles and bubbles like good champagne. If I put molasses in and then insert "vinegar mother" will I spoil it? I have put plenty vinegar mother in with no result. Am not now certain if some sugar was put in the cider years ago.—J. G., Pa.

Reply: I have no experience with crab apple cider further than I know it is of superior flavor. I cannot state why your crab apple cider will not turn into vinegar. I can simply suggest the application of mother from a vinegar barrel. Personally I have never found difficulty in converting cider into vinegar. If your cider was placed in a whisky barrel this may have retarded the cider from turning to vinegar.

Why not gradually fill up your old vinegar barrels with this crab apple cider?

### Riddles

What is that which goes from New York to Washington without moving?—The road.

When is a tall man a little short? When he hasn't quite enough cash.

Which is the oldest tree in England? The Elder Tree.

Why were gloves never meant to sell? Because they were made to be kept on hand.

Of what trade is the sun? A tanner.

Why is B like a hot fire? Because it makes oil—boil.

What makes more noise than a pig under a gate? Two pigs.

## His Success with Apples

Written for Green's Fruit Grower By  
Earle W. Gage, N. Y.

George Lattig, a farmer in the Valley of Idaho is making a fortune from his 40 acre apple orchard. In the past seven years from the 35 acre tract that is bearing, he sold \$44,890 worth of apples, while 10 acres more will soon be producing. It was in the spring of 1900 that he bought the land and undertook the serious undertaking of preparing his new apple home. He was a young man with limited capital, but he had red blood and a purpose not easily thwarted. The land with the water right cost him \$75 per acre, or \$3,000. As he was not required to make a large initial payment, he spent his money in developing a fruit orchard at once.

One year, unbranched trees were set of the principal marketable varieties of apples. While he was working and waiting for the trees to develop he grew sufficient crops between the rows to produce the feed for his farm stock, while he sold several thousand dollars worth of potatoes and vegetables.

Mr. Lattig found it quite a job to properly prune a 35-acre growing apple orchard, and for the first three years did the work during February and March. Summer pruning was practiced the fourth and fifth year, and judicious summer pruning has a tendency to check rampant wood growth and causes the trees to direct their energy into the development of fruitspurs. But the tops were always trimmed so that the land could be cultivated right up to the tree. The tops were set at about 18 to 24 inches from the ground. Therefore, the angle of the branches insured support for a heavy burden of fruit without threatening to split the limbs from the body when the tree attained size for fruit production.

In the Lattig orchards the value of proper pruning is illustrated with Rome Beauty. The fruit is well distributed throughout the tree. Mr. Lattig's Rome Beauty trees averaged 16 boxes per tree of strictly high grade fruit without breaking the limbs under the load. The method of training the tree while young sets the top to withstand the crop burden that may be expected of the mature tree.

Proper thinning of the fruit has been another secret in preserving trees bearing heavy yields. The thinning process leaves the fruit well distributed throughout the tree. The pruning process opens the tree sufficiently to admit air and sunshine to aid in giving proper color and finish to the fruit hanging on the interior branches. Regulating the amount of fruit that a tree may bear allows normal growth of fruitspurs that will yield the next year's crop. The science of pruning and thinning preserves a normal development and aids the tree to produce annual crops instead of biennial crops.

But Mr. Lattig did not allow his trees to produce a commercial crop until the trees had become well established, which has been a great mistake with many fruit growers. The sixth year after planting nearly all the fruit was removed from the trees. The seventh year the entire orchard gave an average return amounting to \$74 per acre, or \$2,960. The eighth year the crop brought \$244 per acre, or \$8,550, while the ninth year after planting the orchard netted \$471 per acre, or \$16,500.

The seven year period of the orchard, beginning when the trees were only six years old, has given Mr. Lattig a total yield amounting to \$44,890. The trees are in their prime just now and will continue to yield dividends annually that will be handsome. The average annual yield for the seven year period was \$6,412,185, or \$183.22 per acre for the term.

### Apple Tree Planting Not Overdone Says Agricultural Student

The apple market for the year 1914-1915 will go down in history as one of the worst that growers and dealers have ever known, but does not this condition of affairs indicate that a stage in orcharding has been reached when we are confronted with serious over-production? The serious minded apple man will not admit it except locally perhaps, but rather he believes our troubles lie in poor distribution, lack of advertising and consequent under-consumption.

The apple crop of the year 1914 is estimated to be 66,000,000 barrels, but of this amount not over one-third, or 22,000,000 barrels will be classed as commercial

pack, according to the American Apple Growers' Association. Contrary to all expectations the export trade up to this date has been greater than for the same period of last year. This means that 20 per cent of the commercial pack will go abroad, leaving 17,600,000 barrels for home consumption, or but a little over a peck for each individual.

These figures indicate that the present depression in the apple market is abnormal at least in so far as the better grades of apples are concerned.

But what of the future? Statistics do not show that there is likely to be a serious over-production as the new orchards coming into bearing do not greatly exceed the acreage that is going into decay. There is hardly enough increase in production to keep pace with the increase in population at the present time. And it is safe to predict that the difference between production and the increase in population will be increased by immigration.

It is no doubt true that there is an over-production of boxed apples in the West, but this condition is believed to be due to faulty distribution. But, however this may be, low prices for the past three seasons have had the effect of putting a stop to orchard exploitations. During this boom period, now happily brought to a close, large areas of unsuitable land were planted to orchards. Many of these trees were bound to come into unprofitable bearing, but their owners have hung on with the hopes of better returns. Now that their eyes are open to the general situation many of these orchards are being neglected, and consequently it will not be long before many acres of land now in orchard will be devoted to their legitimate use—that of growing farm crops.

The apparently temporary over-production in some parts of the West will soon adjust itself and the lack of proper distribution has become a national topic. So it is likely that our system of marketing will be improved greatly in the near future.

All know that years of bumper crops in all sections are unusual and that periods of business depression do not follow each other in rapid succession. Now that a halt has been called to the promiscuous planting of orchards, that a rapid increase in population appears certain, and that the best minds of the country are studying systems of distributions and of marketing, one can only conclude that the future of the legitimate apple grower is brighter than ever before.

### A Song of the Fruit and Flowers

Written for Green's Fruit Grower By  
Albert E. Vassar

I'll sing you a song of the apples  
The peaches, the plums and pear,  
And the various kind of the berries,  
And the quince our praise will share.  
I'll sing you a song of the cherries,  
And the birds will help me sing;  
And to eat while music, comes rapture  
While wealth to my soul 'twill bring.  
I will sing you a song of the flowers  
For we all do know their worth,  
And then odors and gay colors  
Do brighten and sweeten the earth.  
I'll sing you a song of the lily  
Which shows humility,  
And its pure white garb's an emblem  
Of a life of purity.

### A Pound of Honey

When you eat a spoonful of honey you have very little idea as to the amount of work and travel necessary to produce it. To make a pound of clover honey, bees must take the nectar from sixty-two thousand clover blossoms, and to do this requires two million seven hundred and fifty thousand visits to the blossoms by the bees.

In other words, in order to collect enough nectar to make one pound of honey a bee must go from hive to flower and back again two million seven hundred and fifty thousand times. Then, when you think how far these bees sometimes fly in search of these clover fields, often one or two miles distant from the hive, you will begin to get a small idea of the number of miles one of the industrious little creatures must travel in order that you may have a pound of honey.

Mr. Charles A. Green: Enclosed find fifty cents in stamps to renew my subscription for one year. I am eighty years old, but still want the Fruit Grower.—Geo. L. Stuldon, N. Y.

### Many Ready to Help Pick Big Berry Crop

As many as one thousand persons probably are employed by the growers of black raspberries in harvesting the crop at Dundee, N. Y. Besides a large number of the residents of the village who help in this work, men come from near-by cities seeking employment in the hay, berry and grain harvest, as they are laid off from their regular employment in the factories during the summer months.

The black raspberry crop is one of the most important in this section, some growers having as many as fifty or sixty acres devoted to this crop alone. Some growers have the fruit picked by hand, while others bat the berries from the bushes. This latter method is quicker than picking, but, with the ripe fruit, many green berries, short stems and leaves are knocked off, necessitating their being picked over by hand after they are evaporated, while those picked from the bushes are ready for market as soon as dried.

The crop will be unusually large this year.

### Currants and Gooseberries should be Planted in the Fall

Currants and gooseberries begin growth very early in the spring, therefore it is difficult to get them from the nurseries and have them planted early enough in the spring. They are very hardy and

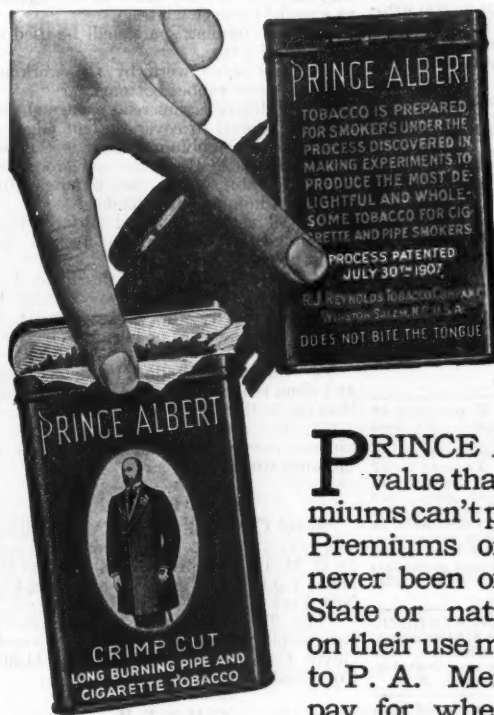
succeed well if planted in October and November, or any time in the fall before winter sets in. These are among the easiest grown of all garden fruits. They are wanted by every housewife and are in demand in the market constantly. If I could have but one I should choose the currant but both are valuable. It is surprising how much fruit a strong currant bush will furnish.

### Watch Your Next Copy

of  
Green's Fruit Grower

If you find a renewal blank between its pages it means that your subscription should be renewed at once. Fill in and mail the blank as soon as you find it, so that you will be sure to get every copy of the paper.

When you write advertisers  
Please mention Green's Fruit Grower.



Buy Prince Albert everywhere tobacco is sold in tippy red bags, 5c; tidy red tins, 10c; handsome pound and half-pound tin humidors, and that classy pound crystal-glass humidor with sponge-moistener top that keeps the tobacco in such fine condition.

You get  
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PRINCE ALBERT has a value that coupons or premiums can't produce—*quality*! Premiums or coupons have never been offered with P. A. State or national restrictions on their use make no difference to P. A. Men get what they pay for when they buy the national joy smoke—*quality*!

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of a friendly old jimmy pipe or a home made cigarette unless you get on talking-terms with Prince Albert! P. A. comes to you with a *real reason* for all the goodness and satisfaction it offers. It is made by a patented process that cuts out bite and parch! It affords the keenest tobacco enjoyment!

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# PRINCE ALBERT

the national joy smoke

R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Copyright 1916 by R. J. Reynolds Tobacco Company

**Tar, Paint and Grease on Fruit Trees**  
C. A. Green: Please tell me by return mail, if pine tar applied to, say 6 inches of the trunks of apple trees to keep out borers, will injure the trees.

What about applying a thin coating of C or D grade of hard asphaltum while hot? I read that a California peach grower does it successfully. Would New York's climate affect the use of it?

One man told me to use a coating of pine pitch. He said he had safely used it for some time.

What preventive measures would you advise?

I have 500 young trees varying in age from 8 to 3 years set, and therefore I do not care to indulge in any disastrous experiments. My trees are growing nicely—some have blossomed this year.

Is there such a thing as an early Spy apple?

I bought 50 Spy trees and 5 of them are all leaved out, while the rest except one are just showing signs of budding. The exception is in blossom. I knew when I set it that it was not a Spy from its habit of growth.—H. R. Taylor, N. Y.

Reply: I would not dare advise the use of any kind of tar or paint or grease on the trunks of apple trees or other fruit trees, since we do not know definitely what any of these materials are made of. I have known fruit trees to be injured by such applications, but there are instances where they have not been injured, but the risk is too great to experiment with. I also would not dare apply anything so hot as you mention, but have no experience with asphaltum, which I regard as something of a tarry substance. My advice is that you do not try experiments along the line of coal tars.

### Classified Advertisements

No display advertising will be placed in this department and no type larger than 6-point. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. Rate 10 cents per word for each insertion. No advertisement inserted for less than \$1 per issue. We cannot afford to do any bookkeeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

### HELP WANTED

**\$550.00 CLEAR IN 90 Days.** If you want to know how to make it, write us quick. We need high-grade representatives for the one book that tells how to make farming pay—Successful Farming. Covers every phase of agriculture. Prepared by 37 leading authorities on farming, fruit-growing and stock-raising. Full of money-making plans, facts and ideas. Fully illustrated. Remarkably low price. Easy to show any farmer, fruit-grower or stock-raiser how this book helps him make more money. Exceptional opportunity for large profit. No capital required. Sample book and particulars free. Universal House, 540 Winston Bldg., Philadelphia.

**MEN-WOMEN WANTED EVERYWHERE.** U. S. Government Jobs. \$75.00 to \$150.00 month. Vacations. Common education sufficient. Write immediately for free list of positions now obtainable. Franklin Institute, Dept. O147, Rochester, N. Y.

**WE WILL PAY YOU \$120.00 for congenial work in your own community.** 60 days or less. Man or woman. No capital required. Opportunity for promotion. Spare time may be used. Full particulars free. International Press, 330 Winston Bldg., Philadelphia, Pa.

### FOR SALE

**DUROC PIGS \$16 pair.** Pedigreed. S. O. Weeks, De Graaf, O.

**FOR SALE—Pecan and Paragon Chestnut trees.** Joseph Moore, Montoursville, Pa.

**3000 FERRETS.** Prices and book free. N. Knapp, Rochester, O.

**OVERCOME CONSTIPATION and headache** and greatly lessen liability to appendicitis; natural safe home method. Full directions fifty cents. Postal Cards never answered. Regulator Co., Box 687, Milwaukee, Wisconsin.

### MISCELLANEOUS

**YOUNG MAN, WOULD you accept a tailor-made suit just for showing it to your friends? Then write BANNER TAILORING CO., Dept. 408 Chicago and get beautiful samples, styles and a wonderful offer.**

**GINSENG and Golden Seal.** Money made growing roots. Circular free. D. E. Banghey, Chambersburg, Pa.

### FARMS FOR SALE

**GOOD FARMS** in nearly every desirable section of New York State. Tell us what kind of farm you want and how much cash you can pay and we will send you a carefully prepared list of just such places. Central Office The Farm Brokers' Association, Inc., Oneida, N. Y. Other offices throughout the State.

paints and greases on the trunks or branches of fruit trees. There is a preparation known as Borowax which is a good preventive of borers. A heavy coating of whitewash made of lime and water is a safe application and might be a partial preventive, but I have no experience as the borer does not do serious work at Green's Fruit Farm. I do not know of an early Spy apple.

### I Remember

I remember, I remember the house where I was born, the little window where the sun came peeping in at morn, says Indiana Farmer. You'd hardly know the old place now, for Dad is up-to-date and the farm is scientific, from the back lot to the gate. The house and barn are lighted with bright acetylene, the engine in the laundry is run by gasoline; we have silos, we have autos, we have dynamos, and things, a telephone for gossip and a phonograph that sings. The hired man has left us—we miss his homely face—a lot of college graduates are working in his place. There's an engineer and fireman, a chauffeur and a vet., electrician and mechanic, oh, the farm's run right, you bet.

### To Minimize Unreliability in Repairs to Trees

The United States Department of Agriculture is suggesting a plan that may help put commercial tree surgery on a better basis. Owners are urged to have a definite written contract with the tree surgeons they employ, and the following is suggested as a model for such contract.

(1) No climbing spurs shall be used on any part of a tree.

(2) The shoes worn by the workmen shall have soft rubber bottoms.

(3) Ordinary commercial orange shellac shall be applied to cover the cut edges of sapwood and cambium (which is the soft formative tissue which the new wood and bark originate) within five minutes after the final trimming cut is made.

(4) All cut or shellaced surfaces shall be painted with commercial creosote, followed by thick coal tar.

(5) All diseased, rotten, discarded, water-soaked, or insect-eaten wood shall be removed in cavity work and the cavity inspected by the owner or his agent before it is filled.

(6) Only a good grade of Portland cement and clean sharp sand in no weaker mixture than one to three shall be used to fill cavities.

(7) The contractor shall repair free of expense any defects that may appear in the work within one year.

### Books Received

"Sweet Corn Culture" by A. E. Wilkinson, price 75 cents. "Mushroom Growing" by B. M. Duggar, price \$1.50. Both of the above publications from Orange Judd Co., New York City.

"The Torrens System, Its Simplicity, Serviceability and Success," by Arnold Guyot Cameron, from Houghton, Mifflin Co., Cambridge, Mass.

### CHEER

Written for Green's Fruit Grower By B. F. M. Sours

Is it raining? It will shine,  
Rainbows wait the breaking;  
Is it blowing? after while  
Bird-songs will be waking.

Is it cloudy? are you dull  
With the wear of hurry?  
Go it easy; let your heart  
Banish needless worry.

Is it raining? It will shine.  
God is watching over;  
Joy is yours if you but creep  
Neath His wings as cover.

### Anne's Presentiment

(Continued from page 15)

"What are you going to do Jane? You'll be murdered in your tracks."

Ann certainly is foolish at night. I wasn't very much afraid when I heard that knock on the door. That hoot owl scared me more than any man I had ever seen. So I put on my slippers and took my best kimono out of the closet in less time than it takes to tell. I was glad I didn't put my hair up in curl papers.

Before I reached the front door I heard Ann come pattering down stairs, and she stood at my elbow when I slipped the bolt.

I didn't take down the burglar chain, we have on our door. It would let me get a look at the man, without letting him in unless I wanted to. So I opened the door.

It was moonlight and I could see the man plainly. He was younger than I had expected and I thought he had a very pleasant face.

"I beg your pardon," he said, "but will you help us out. Now just a minute I don't want you to take my word for it. I'll have Mr. Anstruther back me up." He laughed boyishly, and I took down that chain.

"You see, Mr. Anstruther and Betsy are out in the car. Mr. Anstruther is a minister and Betsy is to be my wife. We need your help badly. Betsy remembered seeing you at that Pioneer's picnic last summer. Do you remember? Can't they come in, and when we've put the car in the barn I'll explain."

Before I could say a word, I saw a slim little girl spring out of the car and come running up the path. As soon as I saw her I remembered her. She had silky golden hair, and great big brown eyes. (Ann and I stared at her shamelessly at that pioneer picnic.) They had introduced her as Betsy Holden. And I was prepared to lecture this young man soundly. Even if he was nice and boyish looking, the idea of eloping with Betsy Holden! And then she flew right into my arms.

"Dear Miss Lane, please be kind and help Kirk. We aren't running away from father and mother. I'll tell you all about it. Just let Kirk put the car in the barn. Please Miss Jane."

The young man looked at her as though he could just gobble her up. She was so sweet like.

"I can see it's all off with you, Miss Lane. I'll put the car in the barn right away."

"I'll go along and show you the way," said Ann just as free and easy. That boy had the effrontery to walk off without waiting for me to say a word. I could see him helping Ann into the car, and they were laughing fit to kill. I suppose I did look surprised.

"Never mind dear," laughed Betsy, squeezing my hand. "Come and let me tell you about it before they get back."

So we went in the living room and I lighted the big study lamp. Betsy sat beside me on the settee. She looked up at me from under those long lashes and blushed adorably. It was too bad the young man had to miss that look. Then she slid along closer to me, and found my hand.

"You see dear Miss Lane, daddy and mother had planned a big wedding for me next week. So tonight we were to have talked over plans for the rehearsal. Mr. Anstruther is—is," she blushed more'n before and I said, "Mmh!" "Well Mr. Anstruther told us that the boys were planning to steal Kirk next week. It's a perfectly silly fad they have had this year. Think of stealing a girl's bridegroom on her wedding night, and I said I just wouldn't tolerate such nonsense, and Kirk said he wouldn't either. I have the dearest father, he just stood by us and backed us up. He coaxed mother to give up the idea of the big wedding, and we sneaked off tonight and expected to go to Mr. Anstruther's home beyond Roger's Corners. And then—the gasoline gave out for some unknown reason. I was just about ready to cry—when all of a sudden I thought of you and Miss Ann. Can't we be married here?"

"Here," I exclaimed breathlessly. "Here, a wedding here. Why bless you I—I—well I'll see what Ann says."

"Oh, please don't wait to decide, it will be all right with Miss Ann and then I can get my dress on. I have it here in the suit case. Please, Miss Jane."

"Well," I gave in, "I'll call Tabitha out and we'll fix up the parlor and give you a real wedding if it is out here in the country."

"And you must be bridesmaids," declared the young man who stood in the doorway with Ann. "Oh, you must. Miss Ann said she would." I looked at Ann who actually blushed and she is forty-five going on forty-six.

"Well, all right, if you will give Ann and me time to dress decently. I certainly am not going to officiate at Betsy Holden's wedding attired in a kimono and bed room slippers."

So we roused poor grumbling Tabitha; and Ann, Betsy and I went upstairs to get ready for the wedding. I put on my best silk that I kept for Christmas and leaving Ann to help Betsy, I went down to make

our stiff old parlor more festive like. Tabitha and I moved the three rubber plants in from the porch, and we stripped all the lilac bushes of their blossoms and just covered the old white fire place.

I lighted grandmother Lane's beautiful old silver candle sticks. Mr. Anstruther was an Episcopalian. When he came in, clad in his robes, and followed by Betsy's lover, I felt as though this was going to be better than any planned-long-before-worried-to-pieces-and-hurried-to-death wedding.

Tabitha and I sat down, but Mr. Kirk and the minister paced up and down. The minister kept getting whiter and whiter. I drew a big breath of relief when Ann and Betsy came rustling in. Such a beautiful, starchy-eyed Betsy, with my loveliest white roses in her hair.

Her dress was white and soft, of some fluffy stuff that made her look like a fleecy cloud princess. She went right up to Kirk, and Mr. Anstruther began to read the lovely service. Not that I ever expect to, but if I do marry, I should like to be married by the Episcopalian service even if I am a Baptist.

"Kirk wilt thou have this woman to be thy wedded wife?" said Mr. Anstruther. "I will," answered Betsy's lover reverently.

"Betsy wilt thou have this man to be thy wedded husband?"

"I will," murmured Betsy and her voice was not much more trembly than the ministers. I couldn't think what was the matter with the young man.

And then he pronounced the benediction and Betsy Holden was Betsy Hallowell. Of course we kissed the bride—all except that Mr. Anstruther and he just touched her fingers lightly with his lips, just the way they do in story books, only it didn't seem a bit silly.

"I'm going on to Roger's Corners, Kirk," said the minister, and then as Kirk would have interrupted, "It's only a five mile walk and you know I like to hike. I'll send them out with some gasoline first thing in the morning. Come and see me, people."

And he was gone. Somehow I just had it firmly in my mind that he was sick or unhappy. Something was wrong. So I followed him out in the hall.

He stood beside the door, with his face buried in Betsy's old motor coat.

"Oh," I said foolishly.

"I beg your pardon," he exclaimed, looking at me soberly. He didn't act a bit like a minister. He looked just as my little brother used to when dad had been unusually hard on him.

"Why my dear," I said without stopping to think. "You—you—"

"Yes, I loved Betsy," he smiled wistfully, "but she didn't know it." I wasn't so sure of that, but I was awfully sorry for him. I patted him on the arm.

"Don't you mind dear. I don't blame you for loving Betsy. I do myself. But don't you grieve too much laddie. The world is full of lovely girls, and you are too nice a boy to have your life spoiled even for Betsy."

His nice gray eyes began to twinkle. Before I knew what he was thinking, he put his arm around me.

"I didn't kiss the bride," he remarked "but I'm going to kiss you for luck. You're a dear Miss Jane." And he did, he kissed me twice.

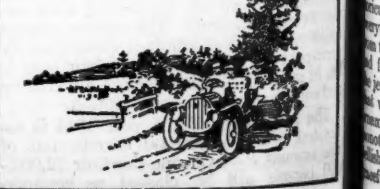
"Goodnight," I called to him. "I hope I'll come to your wedding."

He waved his cap. "Goodnight Miss Jane."

"Well," said a voice at my elbow. "Well, for goodness sake, Jane Elizabeth Lane. At your age too. I shouldn't wonder if that was my presentiment."

"Presentiment fiddlesticks!" I snapped, "your presentiments are never so nice."

And I patted my cheek softly where Mr. Anstruther had kissed me. I hope he'll find a lovely girl for his wife. I wonder if he will invite me to the wedding.



# Green's Fruit Grower

## Fall or Spring Planting?

Each year the old question of spring versus fall planting comes up. One would think that the best practice would have been settled long ago. Yet, like Banquo's ghost, it is constantly reappearing. Some growers say: "Yes, of course, the nurseryman advocates fall planting; it helps him to get his stock disposed of early." Undoubtedly it is true that discussion of fall planting does help the nurseryman, yet this is not the only reason for fall planting.

**The Climate.**—Climate plays an important part in planting trees. A climate that is subject to low temperatures over a protracted season works against the success of fall plantings. A climate that suffers from severe cold, coupled with a very dry air, is not suited to fall planting. Such a climate will tend to withdraw the moisture from the exposed tops of freshly set trees, cause shriveling of the tissues and finally death. All fruit trees can withstand severe cold much better if the humidity is not too low.

A fall planted tree has the jump on its spring planted neighbor and has made a good growth before hot weather starts in and droughts are apt to occur. The spring planted tree is under a handicap from the beginning, as often much good growing weather is sacrificed before the ground can be put in shape for planting, and all freshly made root wounds require some time to callous over before root growth starts. The warm weather forces open the leaf buds before the root system has been adequately developed to supply the rapidly expanding leaves with moisture and plant food. In climates that will allow of fall planting one is more sure of getting a perfect stand and of the best trees getting a good growth the first season.

In our own plantings and in the plantings of others we have noticed that fall planted trees make a much more vigorous growth during the first season, than spring planting. Often we have noted that fall planted trees made twice the growth of their spring planted neighbors. As our experience has been limited to a humid climate, we would not venture to assert that the same would be true in an arid climate.

Along the Middle Atlantic coastal region we firmly believe that it is best to fall plant nearly all fruits. In the most of the Middle West fruit growing regions we believe that apples will do best if fall planted.—The Practical Farmer.

## Talks with the Flowers

Written for Green's Fruit Grower

Beautiful flower, fair art thou,  
Blooming in thy little bower,  
Sought but thy presence gives me now  
Consolation in this lone hour.

It is sweet to lay our cares aside  
In the cool and fragrant retreat,  
And softly curtailed from the world  
By thy beauties so pure and sweet.

Thy fresh breath there comes a balm  
That soothes me to a quiet rest,  
And in thy changing life so calm,  
A lesson comes—Be not depressed.

The golden lesson thou dost teach  
Isied abroad like gentle showers,  
And searching minds find in their reach  
A heavenly beauty in the flowers.

We learn of thee while thou art life,  
Thou emblem of our own short life,  
To clothe with sweet humility  
The heart for all eternity.

Martha Cary Seyles.

## Beautiful Flowers to Look At

Horticulture has been called the poetry of agriculture, and so it is. It embraces the most beautiful features of country life. Flowers and their culture add greatly to the pleasures of any home; and in the country, where there is plenty of room, it is possible to have much more of an ornamental culture than within the confines of a town or city lot. Yet, there is much in the way of horticulture in the towns and cities, and if anything of that nature was banished from them they would be positively desolate and forbidding. Flowers and foliage are the jewels which deserve the richest setting. Wealth can give them. They are the ornaments that relieve the barrenness and monotony of brick and stone. They emphasize the formality of architecture. The softness of a spray of foliage, or the

innocent gayety or quiet modesty of a flower takes away the sternness of the mason's handiwork or the glare left by the painter's brush.

Flowers add beauty and grace to the loveliest toilet. They cheer and minister to the lonely cripple. In health or sickness, in plenty or poverty, they are silent but magical in their influence for good. They are a gift from God to aid us in lifting our thoughts above the bitterness of life. A home without flowers is, in a measure, desolate and dreary. They have saved many a child from thoughts and deeds of sin. The heathen, who bedeck themselves with garlands of flowers, are unconscious witnesses of the love for humanity of the heavenly Father. A true lover of flowers can scarcely be very wicked. Beauty and goodness are twin sisters. Let us cultivate the one and the other will come unbidden and dwell with us.

## Good Homes

The home of the horticulturist is usually a good one. In my travels up and down the country I have been in many homes, and whenever and wherever fruits and flowers were found in abundance there was almost sure to be found happiness and contentment. Some might not, at first, think them so substantial and satisfying as if there was more show of solid wealth, but, in the end, they will be found to be more so. Those things which some might consider only luxuries, are to the horticulturist, every-day necessities. He lives, moves among and deals in the best part of life's enjoyments.

## Horticulture Makes Good Company

"Birds of a feather flock together" is eminently true in horticulture. We have social gatherings as well as business meetings and conventions. Which ever kind we attend we always have a good time. Without any thought of egotism, I may safely say that the horticultural people are good people. I do not believe there is a better class of men and women in any other vocation in the world, and few as good. If there is, I have never met them. Intelligence, progress, industry, refinement and morality are among their principal characteristics. Of what better stuff can men, women and children be made? Are such not likely to be good company? Verily, they are; as I know by lifelong acquaintance with hundreds of them. My dearest friends on earth, aside from those of my own family, are my horticultural acquaintances, and I trust they will be near me to my dying day. They are good, and I truly love them, because they are good company.—H. E. V.

## Location of Shrubs and Trees

"As much of the available ground as possible should be devoted to grass. Trees should be placed where they will give shade, and yet not intrude upon the landscape picture. On the edges of the lot, in the background, or, if of suitable size and contour, at either side of the main entrance to the church, are ideal locations. Shrubs and low evergreens should be used in groups or masses only, in front of the foundations, in angles of the building, or in corners of the yard. The place for flowers is in front of or mingled with the shrubbery, or as borders to walks, never in beds cut out of the lawn. The kinds or varieties of planting material should be similar to those prevailing in the vicinity, so there will be no harsh contrast. These are general rules it will be found safe to follow, in full assurance that the results will be pleasing and in good taste."

I will enclose money-order for \$1.00 for a three years subscription to Green's Fruit Grower as I cannot get along without it.—L. C. Andrews, N. Y.

## Hill Side Orchards

While hill sides and hill tops are favorable sites for orchards of peach, plum, pear or apple, or indeed for any of the tree fruits, there are some objections. It is more difficult to plow and cultivate orchards on steep hill sides, more difficult to spray, more difficult to handle the fruit when picked. The advantages of hill side or hill top orchards are that they are less often injured by late spring frosts and the trees not liable to have wet feet, which is a fatal condition in any orchard. If the hill side has a northern slope it will be an advantage, for the blossoms will be retarded about ten days over trees grown on the eastern or southern slope.

## The Farmer Nature Student, John Burroughs

When John Burroughs writes about these friends of his he writes in a way unusual among the people rather clumsily termed nature-writers, says New York Times. He himself has told us of the lessons he drew from the example of the bee. The bee, he tells us, does not get honey from the flowers, it gets nothing but sweet water. The bee retires with this sweet water, thinks it over, and by a private process makes it into honey. John Burroughs believes that he should give the world not a bare record, but something flavored with his own personality—as the bee gives the world not sweet water, but sweet water turned into honey by the addition of its own formic acid.

On an Autumn day John Burroughs, writing in his orchard study, watches a sapsucker busy on a veteran apple tree. The sapsucker, he sees, goes about his work systematically, visiting now one of the large branches, and then a portion of the

trunk, and drilling his holes in rows about a quarter of an inch apart. Every square foot of the trunk contains from three hundred to four hundred holes, new and old, cut through the inner, vital cambium layer. The holes are about the size of the end of a rye straw, and run in rings around the tree, the rings being about half an inch apart.

So far we have merely accurate scientific observation. But now comes a characteristic John Burroughs touch. "The newly cut holes," he says, "quickly fill with sap, which, to my tongue, has a rather insipid taste, but which is evidently relished by the woodpecker." The reader readily imagines that majestic old head, with its great cloud of white beard and hair, among the brown boughs of the old tree, as John Burroughs, in all simplicity, tastes the sap, not disdaining to drink after the woodpecker. It is an engaging picture.

John Burroughs listens to a "soft, gentle conversation" between the woodpecker and his mate, but he does not repeat it to us. He has the courtesy of appropriate reticence.

There are pages dealing with the manners and morals of the chipmunk suggestive of M. Henri Fabre's studies of the bee. John Burroughs tells us of a certain chipmunk who nibbles the pulp of apples in the orchard. He takes the cherry pits and peach pits and cracked wheat and kernels of corn that are brought him, and has become so familiar with the naturalist that he climbs to his lap, then to the table, then to his shoulder and head. John Burroughs determined, he tells us, to vary his friend's diet. He offered him rice, but found him indifferent to it. Then the chipmunk nibbled it, liked the flavor, and began to fill his cheek pockets with it.

## Books Received

"The Principles of Plant Culture," L. H. Bailey, editor. The MacMillan Co., publishers, New York. Cloth cover, 300 pages, price \$1.50.

"Subtropical Vegetable Gardening," by P. H. Rolfs, L. H. Bailey, editor. Published by The MacMillan Co., New York. 300 pages, price \$1.50.

## The Coconut's Three Eyes

Who can tell why the coconut has three eyes? Luther Burbank explains it this way:

Cocoanuts generally grow at the edge of the sea or rivers. The nuts are surrounded with a thick husk with a waterproof covering so that when they drop into the water they will float. In floating, the three eyes are always on top.

Once in the water Nature gets busy. From one of the eyes there comes a shoot which develops broad leaves like sails. The wind catches the sails and wafts the coconut on a journey sometimes many miles long. As it sails, the other two eyes develop roots, which at first grow among the fibres of the woody husk.

In good season, the coconut is swept upon another shore, perhaps on another island. The roots imbed themselves in the soft earth, the sail becomes the trunk, and a coconut palm is growing where none grew before.—Philadelphia "North American."

## Men Must Mix

If there is just one thing this country needs above all others, it is for its people to mix more with each other and with the world. It is often said that the American is the greatest traveler in the world, but that is only half a truism—it applies to a few people. The great mass of us stick around in one place altogether too much.

One result of this provincialism, and there are many, is the creating of the impression within us that our people—those of our own little community—are not quite like the people in the big world outside. We get the notion too often that our neighbors are narrow and petty, which perhaps is true. But we fail to catch the idea that we ourselves are perhaps more narrow and more petty.

**Judge J. A. Perry.**—It is idleness and not intoxicating liquor that is the greatest cause of crime. All crime is generally charged to whiskey. I thought so until I went to the criminal court in Denver and presided for more than a year and had every kind of a case before me. Ninety per cent of crime is caused by idleness—city idleness. I have talked with other judges who have presided in the same court and they agree that whiskey and strong drink is not the cause of crime. The two often go together but we can not say truthfully that drink causes over ten per cent of the crime. Loafing and the lack of proper home training are at the bottom of nearly all of the crime.

## Answer to Henry Carson, of Conn.

I planted a peach orchard in Colorado in 1906. This is an irrigated district. At the start I cut the trees to a straight stick about 15 inches high. Did not get water the first year for irrigation so hauled in barrels enough to keep the trees alive, so got but small growth that season. In March 1907 had plenty of water and cut the growth back to about 3rd bud on the outside of branch, leaving about 4 branches or stubs. That year got an average of 4 feet growth. In the spring 1908 I cut back all growth to about the 5th bud on outside and that year got growth of about 5ft. Sold it that year for \$2,500 per acre. The owner reported an average yield of 8 boxes per tree, or about 3 bu. which sold at the average price of 52c. per box.

Cutting back heavy each year makes stocky and strong trees. By annual heavy pruning and thinning of fruit the trees live long and produce large crops. Three years ago an orchard there of early and undesirable varieties was pulled out. They were 20 years old and were producing from 20 to 40 boxes per tree, and had borne good crops every year since coming into bearing.—Samuel L. Carson, Neb.

## Good Service

Poultry can do good service in eating the white grubs and other insects freshly turned up by the plow. They do no service in picking up the angle worms, for angle worms accomplish friendly work for mankind. It is doubtful if man could survive upon the earth if angle worms had not prepared the soil for man's occupancy. Every acre of farm land has been digested by angle worms over and over again and in this way made the soil fertile.



Helping Mother

**Tar, Paint and Grease on Fruit Trees**  
C. A. Green: Please tell me by return mail, if pine tar applied to, say 6 inches of the trunks of apple trees to keep out borers, will injure the trees.

What about applying a thin coating of C or D grade of hard asphaltum while hot? I read that a California peach grower does it successfully. Would New York's climate affect the use of it?

One man told me to use a coating of pine pitch. He said he had safely used it for some time.

What preventive measures would you advise?

I have 500 young trees varying in age from 8 to 3 years set, and therefore I do not care to indulge in any disastrous experiments. My trees are growing nicely—some have blossomed this year.

Is there such a thing as an early Spy apple?

I bought 50 Spy trees and 5 of them are all leaved out, while the rest except one are just showing signs of budding. The exception is in blossom. I knew when I set it that it was not a Spy from its habit of growth.—H. R. Taylor, N. Y.

Reply: I would not dare advise the use of any kind of tar or paint or grease on the trunks of apple trees or other fruit trees, since we do not know definitely what any of these materials are made of. I have known fruit trees to be injured by such applications, but there are instances where they have not been injured, but the risk is too great to experiment with. I also would not dare apply anything so hot as you mention, but have no experience with asphaltum, which I regard as something of a tarry substance. My advice is that you do not try experiments along the line of coal tars.

### Classified Advertisements

No display advertising will be placed in this department and no type larger than 6-point. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. Rate 10 cents per word for each insertion. No advertisement inserted for less than \$1 per issue. We cannot afford to do any bookkeeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

### HELP WANTED

**\$550.00 CLEAR IN 90 Days.** If you want to know how to make it, write us quick. We need high-grade representatives for the one book that tells how to make farming pay—Successful Farming. Covers every phase of agriculture. Prepared by 37 leading authorities on farming, fruit-growing and stock-raising. Full of money-making plans, facts and ideas. Fully illustrated. Remarkably low price. Easy to show any farmer, fruit-grower or stock-raiser how this book helps him make more money. Exceptional opportunity for large profit. No capital required. Sample book and particulars free. Universal House, 540 Winston Bldg., Philadelphia.

**MEN-WOMEN WANTED EVERYWHERE.** U. S. Government Jobs. \$75.00 to \$150.00 month. Vacancies. Common education sufficient. Write immediately for free list of positions now obtainable. Franklin Institute, Dept. 0147, Rochester, N. Y.

**WE WILL PAY you \$120.00 for congenial work in your own community.** 60 days or less. Man or woman. No capital required. Opportunity for promotion. Spare time may be used. Full particulars free. International Press, 330 Winston Bldg., Philadelphia, Pa.

### FOR SALE

**DUROC PIGS \$16 pair.** Pedigreed. S. O. Weeks, De Graff, O.

**FOR SALE—Pecan and Paragon Chestnut trees.** Joseph Moore, Montoursville, Pa.

**2000 FERRETS.** Prices and book free. N. Knapp, Rochester, O.

**OVERCOME CONSTIPATION and headache and greatly lessen liability to appendicitis; natural safe home method.** Full directions fifty cents. Postal Cards never answered. Regulator Co., Box 687, Milwaukee, Wisconsin.

### MISCELLANEOUS

**YOUNG MAN, WOULD you accept a tailor-made suit just for showing it to your friends? Then write BANNER TAILORING CO., Dept. 408 Chicago and get beautiful samples, styles and a wonderful offer.**

**GINSENG and Golden Seal.** Money made growing roots. Circular free. D. E. Banghey, Chambersburg, Pa.

### FARMS FOR SALE

**GOOD FARMS in nearly every desirable section of New York State.** Tell us what kind of farm you want and how much cash you can pay and we will send you a carefully prepared list of just such places. Central Office The Farm Brokers' Association, Inc., Oneida, N. Y. Other offices throughout the State.

paints and greases on the trunks or branches of fruit trees. There is a preparation known as Borowax which is a good preventive of borers. A heavy coating of whitewash made of lime and water is a safe application and might be a partial preventive, but I have no experience as the borer does not do serious work at Green's Fruit Farm. I do not know of an early Spy apple.

### I Remember

I remember, I remember the house where I was born, the little window where the sun came peeping in at morn, says Indiana Farmer. You'd hardly know the old place now, for Dad is up-to-date and the farm is scientific, from the back lot to the gate. The house and barn are lighted with bright acetylene, the engine in the laundry is run by gasoline; we have silos, we have autos, we have dynamos, and things, a telephone for gossip and a phonograph that sings. The hired man has left us—we miss his homely face—a lot of college graduates are working in his place. There's an engineer and fireman, a chauffeur and a vet., electrician and mechanic, oh, the farm's run right, you bet.

### To Minimize Unreliability in Repairs to Trees

The United States Department of Agriculture is suggesting a plan that may help put commercial tree surgery on a better basis. Owners are urged to have a definite written contract with the tree surgeons they employ, and the following is suggested as a model for such contract.

(1) No climbing spurs shall be used on any part of a tree.

(2) The shoes worn by the workmen shall have soft rubber bottoms.

(3) Ordinary commercial orange shellac shall be applied to cover the cut edges of sapwood and cambium (which is the soft formative tissue which the new wood and bark originate) within five minutes after the final trimming cut is made.

(4) All cut or shellaced surfaces shall be painted with commercial creosote, followed by thick coat tar.

(5) All diseased, rotten, discarded, water-soaked, or insect-eaten wood shall be removed in cavity work and the cavity inspected by the owner or his agent before it is filled.

(6) Only a good grade of Portland cement and clean sharp sand in no weaker mixture than one to three shall be used to fill cavities.

(7) The contractor shall repair free of expense any defects that may appear in the work within one year.

### Books Received

"Sweet Corn Culture" by A. E. Wilkinson, price 75 cents. "Mushroom Growing" by B. M. Duggar, price \$1.50. Both of the above publications from Orange Judd Co., New York City.

"The Torrens System, Its Simplicity, Serviceability and Success," by Arnold Guyot Cameron, from Houghton, Mifflin Co., Cambridge, Mass.

### CHEER

Written for Green's Fruit Grower By B. F. M. Sours

Is it raining? It will shine,  
Rainbows wait the breaking;  
Is it blowing? afterwhile  
Bird-songs will be waking.

Is it cloudy? are you dull  
With the wear of hurry?  
Go it easy; let your heart  
Banish needless worry.

Is it raining? It will shine.  
God is watching over;  
Joy is yours if you but creep  
Neath His wings as cover.

### Anne's Presentiment

(Continued from page 15)

"What are you going to do Jane? You'll be murdered in your tracks."

Ann certainly is foolish at night. I wasn't very much afraid when I heard that knock on the door. That hoot owl scared me more than any man I had ever seen. So I put on my slippers and took my best kimono out of the closet in less time than it takes to tell. I was glad I didn't put my hair up in curl papers.

Before I reached the front door I heard Ann come pattering down stairs, and she stood at my elbow when I slipped the bolt.

I didn't take down the burglar chain, we have on our door. It would let me get a look at the man, without letting him in unless I wanted to. So I opened the door.

It was moonlight and I could see the man plainly. He was younger than I had expected and I thought he had a very pleasant face.

"I beg your pardon," he said, "but will you help us out. Now just a minute I don't want you to take my word for it. I'll have Mr. Anstruther back me up." He laughed boyishly, and I took down that chain.

"You see, Mr. Anstruther and Betsy are out in the car. Mr. Anstruther is a minister and Betsy is to be my wife. We need your help badly. Betsy remembered seeing you at that Pioneer's picnic last summer. Do you remember? Can't they come in, and when we've put the car in the barn I'll explain."

Before I could say a word, I saw a slim little girl spring out of the car and come running up the path. As soon as I saw her I remembered her. She had silky golden hair, and great big brown eyes. (Ann and I stared at her shamelessly at that pioneer picnic.) They had introduced her as Betsy Holden. And I was prepared to lecture this young man soundly. Even if he was nice and boyish looking, the idea of eloping with Betsy Holden! And then she flew right into my arms.

"Dear Miss Lane, please be kind and help Kirk. We aren't running away from father and mother. I'll tell you all about it. Just let Kirk put the car in the barn. Please Miss Lane."

The young man looked at her as though he could just gobble her up. She was so sweet like.

"I can see it's all off with you, Miss Lane. I'll put the car in the barn right away."

"I'll go along and show you the way," said Ann just as free and easy. That boy had the effrontery to walk off without waiting for me to say a word. I could see him helping Ann into the car, and they were laughing fit to kill. I suppose I did look surprised.

"Never mind dear," laughed Betsy, squeezing my hand. "Come and let me tell you about it before they get back."

So we went in the living room and I lighted the big study lamp. Betsy sat beside me on the settee. She looked up at me from under those long lashes and blushed adorably. It was too bad the young man had to miss that look. Then she slid along closer to me, and found my hand.

"You see dear Miss Lane, daddy and mother had planned a big wedding for me next week. So tonight we were to have talked over plans for the rehearsal. Mr. Anstruther is—is," she blushed more'n before and I said, "Mmh!" "Well Mr. Anstruther told us that the boys were planning to steal Kirk next week. It's a perfectly silly day they have had this year. Think of stealing a girl's bridegroom on her wedding night, and I said I just wouldn't tolerate such nonsense, and Kirk said he wouldn't either. I have the dearest father, he just stood by us and backed us up. He coaxed mother to give up the idea of the big wedding, and we sneaked off tonight and expected to go to Mr. Anstruther's home beyond Roger's Corners. And then—the gasoline gave out for some unknown reason. I was just about ready to cry—when all of a sudden I thought of you and Miss Ann. Can't we be married here?"

"Here," I exclaimed breathlessly. "Here, a wedding here. Why bless you I—I—well I'll see what Ann says."

"Oh, please don't wait to decide, it will be all right with Miss Ann and then I can get my dress on. I have it here in the suit case. Please, Miss Lane."

"Well," I gave in, "I'll call Tabitha out and we'll fix up the parlor and give you a real wedding if it is out here in the country."

"And you must be bridesmaids," declared the young man who stood in the doorway with Ann. "Oh, you must. Miss Ann said she would." I looked at Ann who actually blushed and she is forty-five going on forty-six.

"Well, all right, if you will give Ann and me time to dress decently. I certainly am not going to officiate at Betsy Holden's wedding attired in a kimono and bed room slippers."

So we roused poor grumbling Tabitha; and Ann, Betsy and I went upstairs to get ready for the wedding. I put on my best silk that I kept for Christmas and leaving Ann to help Betsy, I went down to make

our stiff old parlor more festive like. Tabitha and I moved the three rubber plants in from the porch, and we stripped all the lilac bushes of their blossoms and just covered the old white fire place.

I lighted grandmother Lane's beautiful old silver candle sticks. Mr. Anstruther was an Episcopalian. When he came in, clad in his robes, and followed by Betsy's lover, I felt as though this was going to be better than any planned-long-before-wedding. Tabitha and I sat down, but Mr. Kirk and the minister paced up and down. The minister kept getting whiter and whiter. I drew a big breath of relief when Ann and Betsy came rustling in. Such a beautiful, starry-eyed Betsy, with my loveliest white roses in her hair.

Her dress was white and soft, of some fluffy stuff that made her look like a fleecy cloud princess. She went right up to Kirk, and Mr. Anstruther began to read the lovely service. Not that I ever expect to, but if I do marry, I should like to be married by the Episcopalian service even if I am a Baptist.

"Kirk wilt thou have this woman to be thy wedded wife?" said Mr. Anstruther. "I will," answered Betsy's lover reverently.

"Betsy wilt thou have this man to be thy wedded husband?" "I will," murmured Betsy and her voice was not much more trembly than the ministers. I couldn't think what was the matter with the young man.

And then he pronounced the benediction and Betsy Holden was Betsy Hallowell. Of course we kissed the bride—all except that Mr. Anstruther and he just touched her fingers lightly with his lips, just the way they do in story books, only it didn't seem a bit silly.

"I'm going on to Roger's Corners, Kirk," said the minister, and then as Kirk would have interrupted, "It's only a five mile walk and you know I like to hike. I'll send them out with some gasoline first thing in the morning. Come and see me, people."

And he was gone. Somehow I just had it firmly in my mind that he was sick or unhappy. Something was wrong. So I followed him out in the hall.

He stood beside the door, with his face buried in Betsy's old motor coat.

"Oh," I said foolishly.

"I beg your pardon," he exclaimed, looking at me soberly. He didn't act a bit like a minister. He looked just as my little brother used to when dad had been unusually hard on him.

"Why my dear," I said without stopping to think. "You—you—"

"Yes, I loved Betsy," he smiled wistfully, "but she didn't know it." I wasn't so sure of that, but I was awfully sorry for him. I patted him on the arm.

"Don't you mind dear. I don't blame you for loving Betsy. I do myself. But don't you grieve too much laddie. The world is full of lovely girls, and you are too nice a boy to have your life spoiled even for Betsy."

His nice gray eyes began to twinkle. Before I knew what he was thinking, he put his arm around me.

"I didn't kiss the bride," he remarked "but I'm going to kiss you for luck. You're a dear Miss Lane." And he did, he kissed me twice.

"Goodnight," I called to him. "I hope I'll come to your wedding."

He waved his cap. "Goodnight Miss Lane."

"Well," said a voice at my elbow. "Well, for goodness sake, Jane Elizabeth Lane. At your age too. I shouldn't wonder if that was my presentiment."

"Presentiment fiddlesticks!" I snapped, "your presentiments are never so nice." And I patted my cheek softly where Mr. Anstruther had kissed me. I hope he'll find a lovely girl for his wife. I wonder if he will invite me to the wedding.



# Green's Fruit Grower

## Fall or Spring Planting?

Each year the old question of spring versus fall planting comes up. One would think that the best practice would have been settled long ago. Yet, like Banquo's ghost, it is constantly reappearing. Some growers say: "Yes, of course, the nurseryman advocates fall planting; it helps him to get his stock disposed of early." Undoubtedly it is true that discussion of fall planting does help the nurseryman, yet this is not the only reason for fall planting.

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To clothe with sweet humility  
The heart for all eternity.

Martha Cary Scykas.

## Beautiful Flowers to Look At

Horticulture has been called the poetry of agriculture, and so it is. It embraces the most beautiful features of country life. Flowers and their culture add greatly to the pleasures of any home; and in the country, where there is plenty of room, it is possible to have much more of an ornamental nature than within the confines of a town or city lot. Yet, there is much in the way of horticulture in the towns and cities, and if everything of that nature was banished from them they would be positively desolate and forbidding. Flowers and foliage are the jewels which deserve the richest setting that wealth can give them. They are the ornaments that relieve the barrenness and monotony of brick and stone. They embellish the formality of architecture. The gracefulness of a spray of foliage, or the

innocent gayety or quiet modesty of a flower takes away the sternness of the mason's handiwork or the glare left by the painter's brush.

Flowers add beauty and grace to the loveliest toilet. They cheer and minister to the lonely cripple. In health or sickness, in plenty or poverty, they are silent but magical in their influence for good. They are a gift from God to aid us in lifting our thoughts above the bitterness of life. A home without flowers is, in a measure, desolate and dreary. They have saved many a child from thoughts and deeds of sin. The heathen, who bedeck themselves with garlands of flowers, are unconscious witnesses of the love for humanity of the heavenly Father. A true lover of flowers can scarcely be very wicked. Beauty and goodness are twin sisters. Let us cultivate the one and the other will come unbidden and dwell with us.

## Good Homes

The home of the horticulturist is usually a good one. In my travels up and down the country I have been in many homes, and whenever and wherever fruits and flowers were found in abundance there was almost sure to be found happiness and contentment. Some might not, at first, think them so substantial and satisfying as if there was more show of solid wealth, but, in the end, they will be found to be more so. Those things which some might consider only luxuries, are to the horticulturist, every-day necessities. He lives, moves among and deals in the best part of life's enjoyments.

## Horticulture Makes Good Company

"Birds of a feather flock together" is eminently true in horticulture. We have

social gatherings as well as business meetings and conventions. Which ever kind we attend we always have a good time. Without any thought of egotism, I may safely say that the horticultural people are good people. I do not believe there is a better class of men and women in any other vocation in the world, and few as good. If there is, I have never met them. Intelligence, progress, industry, refinement and morality are among their principal characteristics. Of what better stuff can men, women and children be made? Are such not likely to be good company? Verily, they are; as I know by lifelong acquaintance with hundreds of them. My dearest friends on earth, aside from those of my own family, are my horticultural acquaintances, and I trust they will be near me to my dying day. They are good, and I truly love them, because they are good company.—H. E. V.

## Location of Shrubs and Trees

"As much of the available ground as possible should be devoted to grass. Trees should be placed where they will give shade, and yet not intrude upon the landscape picture. On the edges of the lot, in the background, or, if of suitable size and contour, at either side of the main entrance to the church, are ideal locations. Shrubs and low evergreens should be used in groups or masses only, in front of the foundations, in angles of the building, or in corners of the yard. The place for flowers is in front of or mingled with the shrubbery, or as borders to walks, never in beds cut out of the lawn. The kinds or varieties of planting material should be similar to those prevailing in the vicinity, so there will be no harsh contrast. These are general rules it will be found safe to follow, in full assurance that the results will be pleasing and in good taste."

I will enclose money-order for \$4.00 for a three years subscription to Green's Fruit Grower as I cannot get along without it—L. C. Andrews, N. Y.

## Hill Side Orchards

While hill sides and hill tops are favorable sites for orchards of peach, plum, pear or apple, or indeed for any of the tree fruits, there are some objections. It is more difficult to plow and cultivate orchards on steep hill sides, more difficult to spray, more difficult to handle the fruit when picked. The advantages of hill side or hill top orchards are that they are less often injured by late spring frosts and the trees not liable to have wet feet, which is a fatal condition in any orchard. If the hill side has a northern slope it will be an advantage, for the blossoms will be retarded about ten days over trees grown on the eastern or southern slope.

## The Farmer Nature Student, John Burroughs

When John Burroughs writes about these friends of his he writes in a way unusual among the people rather clumsily termed nature-writers, says New York Times. He himself has told us of the lessons he drew from the example of the bee. The bee, he tells us, does not get honey from the flowers, it gets nothing but sweet water. The bee retires with this sweet water, thinks it over, and by a private process makes it into honey. John Burroughs believes that he should give the world not a bare record, but something flavored with his own personality—as the bee gives the world not sweet water, but sweet water turned into honey by the addition of its own formic acid.

On an Autumn day John Burroughs, writing in his orchard study, watches a sapsucker busy on a veteran apple tree. The sapsucker, he sees, goes about his work systematically, visiting now one of the large branches, and then a portion of the trunk, and drilling his holes in rows about a quarter of an inch apart. Every square foot of the trunk contains from three hundred to four hundred holes, new and old, cut through the inner, vital cambium layer. The holes are about the size of the end of a rye straw, and run in rings around the tree, the rings being about half an inch apart.

So far we have merely accurate scientific observation. But now comes a characteristic John Burroughs touch. "The newly cut holes," he says, "quickly fill with sap, which, to my tongue, has a rather insipid taste, but which is evidently relished by the woodpecker." The reader readily imagines that majestic old head, with its great cloud of white beard and hair, among the brown boughs of the old tree, as John Burroughs, in all simplicity, tastes the sap, not disdain to drink after the woodpecker. It is an engaging picture.

John Burroughs listens to a "soft, gentle conversation" between the woodpecker and his mate, but he does not repeat it to us. He has the courtesy of appropriate reticence. There are pages dealing with the manners and morals of the chipmunk suggestive of M. Henri Fabre's studies of the bee. John Burroughs tells us of a certain chipmunk who nibbles the pulp of apples in the orchard. He takes the cherry pits and peach pits and cracked wheat and kernels of corn that are brought him, and has become so familiar with the naturalist that he climbs to his lap, then to the table, then to his shoulder and head. John Burroughs determined, he tells us, to vary his friend's diet. He offered him rice, but found him indifferent to it. Then the chipmunk nibbled it, liked the flavor, and began to fill his cheek pockets with it.

## Books Received

"The Principles of Plant Culture," L. H. Bailey, editor. The MacMillan Co., publishers, New York. Cloth cover, 300 pages, price \$1.50.

"Subtropical Vegetable Gardening," by P. H. Rolfs, L. H. Bailey, editor. Published by The MacMillan Co., New York. 300 pages, price \$1.50.

## The Coconut's Three Eyes

Who can tell why the coconut has three eyes? Luther Burbank explains it this way:

Cocoanuts generally grow at the edge of the sea or rivers. The nuts are surrounded with a thick husk with a waterproof covering so that when they drop into the water they will float. In floating, the three eyes are always on top.

Once in the water Nature gets busy. From one of the eyes there comes a shoot which develops broad leaves like sails. The wind catches the sails and wafts the coconut on a journey sometimes many miles long. As it sails, the other two eyes develop roots, which at first grow among the fibres of the woody husk.

In good season, the coconut is swept upon another shore, perhaps on another island. The roots imbed themselves in the soft earth, the sail becomes the trunk, and a coconut palm is growing where none grew before.—Philadelphia "North American."

## Men Must Mix

If there is just one thing this country needs above all others, it is for its people to mix more with each other and with the world. It is often said that the American is the greatest traveler in the world, but that is only half a truism—it applies to a few people. The great mass of us stick around in one place altogether too much.

One result of this provincialism, and there are many, is the creating of the impression within us that our people—those of our own little community—are not quite like the people in the big world outside. We get the notion too often that our neighbors are narrow and petty, which perhaps is true. But we fail to catch the idea that we ourselves are perhaps more narrow and more petty.

**Judge J. A. Perry.**—It is idleness and not intoxicating liquor that is the greatest cause of crime. All crime is generally charged to whiskey. I thought so until I went to the criminal court in Denver and presided for more than a year and had every kind of a case before me. Ninety per cent of crime is caused by idleness—city idleness. I have talked with other judges who have presided in the same court and they agree that whiskey and strong drink is not the cause of crime. The two often go together but we can not say truthfully that drink causes over ten per cent of the crime. Loafing and the lack of proper home training are at the bottom of nearly all of the crime.

## Answer to Henry Carson, of Conn.

I planted a peach orchard in Colorado in 1906. This is an irrigated district. At the start I cut the trees to a straight stick about 15 inches high. Did not get water the first year for irrigation so hauled in barrels enough to keep the trees alive, so got but small growth that season. In March 1907 had plenty of water and cut the growth back to about 3rd bud on the outside of branch, leaving about 4 branches or stubs. That year got an average of 4 feet growth. In the spring 1908 I cut back all growth to about the 5th bud on outside and that year got growth of about 5ft. Sold it that year for \$2,500 per acre. The owner reported an average yield of 8 boxes per tree, or about 3 bu. which sold at the average price of 52c. per box.

Cutting back heavy each year makes stocky and strong trees. By annual heavy pruning and thinning of fruit the trees live long and produce large crops. Three years ago an orchard there of early and undesirable varieties was pulled out. They were 20 years old and were producing from 20 to 40 boxes per tree, and had borne good crops every year since coming into bearing.—Samuel L. Carson, Neb.

## Good Service

Poultry can do good service in eating the white grubs and other insects freshly turned up by the plow. They do no service in picking up the angle worms, for angle worms accomplish friendly work for mankind. It is doubtful if man could survive upon the earth if angle worms had not prepared the soil for man's occupancy. Every acre of farm land has been digested by angle worms over and over again and in this way made the soil fertile.

# September Sale of Trees



Banana Apple

A long winter keeper. Best quality. Fruits abundantly. Trees bear young

Professor H. E. Van Deman, one of the most noted fruit growers and pomologists, has said over and over again that October and November are the most favorable months for planting fruit trees, also for hardy ornamental plants, vines and trees. Prof. Van Deman gave these reasons why fall is a good season for such planting. The soil is in better condition in the fall than in the spring and the trees are in proper condition for digging and planting. Farmers and others are not so seriously driven in the fall as they are when busy with planting, seeding and fitting of the ground in the early spring. Nurserymen are also not so busy in the fall as in the spring and are thus enabled to give more time and can attend to orders more promptly than in the spring.

## A Big Supply of the Leading Varieties of Apple Trees for Sale

Apple trees are among the items that can be safely planted in the fall. We call attention to such notable varieties of apples as the King, Wealthy, Wagener, Baldwin, Greening, Duchess, Banana, Delicious and many others which we shall begin to dig October first and continue to dig and ship until winter sets in.

### High Grade of Trees at Favorable Prices

Our prices on all we produce are as low as they can be sold consistent with good quality.

### Standard Pear Trees for Sale

October and November are the months for planting standard pears and dwarf pears. Our leading varieties of pears are, Bartlett, the old standard of excellence, Anjou, for early winter, Clapp's Favorite, for early summer, Kieffer, for late fall, Wilder Early, the earliest of all, and Sheldon, one of the best in quality, Worden Seckel, new and popular, Lawrence, Louise Bonne, Vermont Beauty and Bosc. We make a specialty of Bosc, one of the handsomest and of the highest quality.

## Ornamental Trees at Special Low Prices

Owners of parks and those laying out extensive grounds should be attracted to our special prices for the following ornamental trees, Silver Maple, Norway Maple, Ash-leaved Maple, American White Elm, Carolina Poplar, Deutzia, Spiraea and Norway Spruce.

We offer special prices on Downing gooseberries, asparagus plants and rhubarb roots.

### Green's Apple Collection No. 1

10 Splendid 5 to 7 ft. Apple Trees for \$2.30

- |                           |                   |
|---------------------------|-------------------|
| 1 Banana                  | 4 Green's Baldwin |
| 2 McIntosh                | 1 Northern Spy    |
| 1 R. I. Greening          |                   |
| 1 King of Tompkins County |                   |

Special Price \$2.30 (Sold elsewhere \$5)

### Green's Dwarf Pear Collection No. 1

10 Splendid 3½ to 5 ft. Dwarf Trees for \$1.80

- |                    |                |
|--------------------|----------------|
| 1 Anjou            | 4 Duchess      |
| 2 Bartlett         | 1 Wilder Early |
| 1 Clapp's Favorite | 1 Seckel       |

Special Price \$1.80

(Sold elsewhere \$3.50)

### Green's Shade Tree Collection

6 Extra Large Shade Trees for \$3.50

- |                                      |
|--------------------------------------|
| 1 Norway Maple, 8 to 10 ft. high     |
| 1 Silver Maple, 8 to 10 ft. high     |
| 1 Ash-Leaved Maple, 8 to 10 ft. high |
| 1 Hardy Catalpa, 6 to 8 ft. high     |
| 1 American Elm, 8 to 10 ft. high     |
| 1 Mountain Ash, 6 to 8 ft. high      |

Special Price \$3.50 (Sold elsewhere \$5)

### Green's New Standard Pear Collection

10 of Our Best Trees 5 to 7 ft. high for \$2.70

- |                    |              |
|--------------------|--------------|
| 5 Bartlett         | 2 B. d'Anjou |
| 1 Kieffer          | 1 Seckel     |
| 1 Clapp's Favorite |              |

Special Price \$2.70 (Sold elsewhere \$4)



Beurre Bosc Pears

Highest quality. Abundant bearer. New to most people

### Our New Flowering Shrub Collection for Fall 1916

The Biggest and the Best Collection Ever Offered—20 Shrubs and Plants—20 for \$2.50

- |                         |                              |                 |
|-------------------------|------------------------------|-----------------|
| 1 Spiraea Van Houttei   | 1 Weigelia                   | 2 Paeonies      |
| 1 Spiraea Billardi      | 2 Barberry, Purple and Dwarf | 2 Ostrich Plume |
| 1 Spiraea Callosa Rosea | 1 White Lilac                | 1 Purple Fringe |
| 2 Deutzia, Double White | 1 Purple Lilac               | 1 Golden Bell   |
| 2 Deutzia, Double Rosea | 2 Althea                     |                 |

Total Value at Catalogue Price \$5.00—SPECIAL FALL 1916 PRICE \$2.50

Note—These plants will bloom full next season.

SEND FOR FREE CATALOGUE

Green's Nursery Co., 91 Wall St., Rochester, N. Y.